CABLENET

2024 Product Guide

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Network Patch Leads | Copper Networking | Fibre Networking | Power Leads & PDUs

Computer Cables, AV & Security | Intelligent Power & Active Communications | DataCentre Products

CABLENET

Welcome to the latest edition of our Product Catalogue.

Established in 1997, we pride ourselves on providing an exceptional level of customer service and product excellence, with your very own dedicated account manager.

We offer a breadth of product offerings with over 4000 premium quality, affordable products for all your Computer & Network cabling needs, designed to international standards in our own factories, with incredible stock availability. Our proven business delivery model helps you to quickly solve your connectivity demands with our reliable and competitive range of networking, cabling and power products with copper and fibre optic cabling solutions.

Most of our products are available for next day delivery from our extensive stock held in our 24,000ft warehouse in Surrey. We remain extremely customer focused and strive to offer you the very best customer service and retain your repeat business year after year. We pride ourselves on being a first-choice supplier to the industry and in taking supply problems off your hands; so that you can get on with what you do best.

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Our Sales staff are available from 8.45am to 5.30pm, Monday to Friday to help you with your order or enquiry and confirm pricing and delivery information.

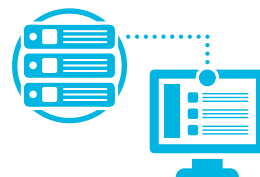**ONLINE**

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For our latest stock information and quick, easy secure online ordering system. Register your account with our website and our fully integrated ERP solution and Advanced Web Services will enable you to see your unique pricing and "Livestock" availability, along with many other features such as delivery tracking information. You are also able to place orders, enquire on an order status and view copy documents via smartphone, tablet, or PC.

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To request information, samples or to place an order.

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EDI & Live-Feed

We offer many options both via EDI and FTP (Live-Feed) files. Our EDI B2B Platform can be tailored to offer Electronic Trading, eliminating paperwork, and enhancing your productivity including Order Tracking, visibility of order status, linked to courier tracking and financial account information.

"Live-Feed" options are constantly updated "Live-stock" linked to our Price Mapping Engine that shows your pricing combined with our Product catalogue information and images.

LIVE WEBCHAT

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Subject to status, written details available on request.

Credit Card

We are pleased to accept account payments by credit/debit cards.

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DISPLAYPORT 2.1 CABLES

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PREMIUM+ USB BRAIDED LEADS

NEW DOCKING STATIONS

USB EPR EXTENDED POWER RANGE 240W

IEC C20 - IEC C19 POWER LEADS

12 COLOURED LC BULK PACK PIGTAILS

POE++

POE++ CAT6 & CAT6A NETWORK LEADS

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What's Inside...

🌱 **Look out for our ESG products, available to order by the box**

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What's Inside...

Introducing our NEW Range of PoE++ Compliant Network Patch Leads

Eighteen months ago, we decided to amend the specification of all our Category 6 and Category 6a Network Patch leads to ensure compliance with the PoE++ standards.

This amendment required us to change the core components used in our cables to a PoE++ certified cable and IEC 60603-7 RJ45 connectors that use our "Full Gold"* RJ45. It has taken us these last eighteen months to cleanse all our old stock and replace it with compliant cables, and we are now pleased to launch our range.

Power over Ethernet Applications

All our cables can be used with the current IEEE 802.3 PoE Standards, including 15W PoE (IEEE 802.3af), 30W PoE+ (IEEE 802.3at), 60W PoE++ (IEEE 802.3bt Type 3), and 100W PoE++ (IEEE 802.3bt Type 4), and still fully backwards compatible with all current networks.

The table below summarizes the different types of IEEE 802.3 standards:

Type	Standard	PSE min. input power	PD guaranteed min. power	Cable category	Max. cable length	Number of pairs
Type 1	IEEE 802.3af	15.4 W	12.95 W	Cat5e	100m	2 pairs
Type 2	IEEE 802.3at	30 W	25.5 W	Cat5e	100m	2 pairs
Type 3	IEEE 802.3bt	60 W	51 W – 60 W*	Cat5e and above	100m	2 pairs class 0-4 4 pairs class 0-4 4 pairs class 5-6
Type 4	IEEE 802.3bt	90 W	71 W – 90 W*	Cat5e and above	100m	4 pairs class 7-8

* Provides power at the destination of 60 W for Type 3 and 90 W for Type 4, if the cable length is known (<100m)

This will ensure PoE++ performance, and the critical compliance standards include:

- Reference to UL 1863 1000V (vs 500V) listing needed for higher levels (Type 3 and 4) of PoE.
- Compliance to IEC60603-7-2011, point 6.6.1 meets the minimum insertion and removal of RJ45 is 750 times and 2500 times for PL2, which only 50μm gold-plated RJ45 connectors can provide.
- The Federal Communications Commission (FCC) has clear regulations on the gold plating thickness of RJ45 contacts - a qualified RJ45 should be constructed using only 50μm gold-plated contacts.

Summary

In summary, the influence of the RJ45's gold plating thickness on the application of PoE++ is reflected in reduced electrical resistance, heat dissipation, corrosion resistance, and wear resistance. When designing and deploying PoE++ systems, choosing a 50μm gold-plated RJ45 connector is important to ensure system performance, reliability, and economic benefits.

As you can imagine, using an increased gold plating layer can increase costs; in summary, when designing and deploying PoE++ systems, you must choose the best-performing cable.

We have managed these performance improvements without any cost increase to ensure your PoE++ systems can meet the higher current and capacity requirements PoE++ requires.

Many of our PoE++ Network Patch Leads are available in our ESG Bulk Packaging options.

ESG - Environmental, Social and Governance

Introducing our ESG Bulk Pack Product offering to help overcome environmental challenges associated with packaging

At Cablenet, an industry-leading computer and network cabling supplier, we have pledged to become more sustainable and eliminate as much packaging as possible, including single-use plastics and packaging of any type. This is in line with our goal to minimise packaging altogether.

At Cablenet, we have a phased approach to introducing ESG (environmental, social and governance) products that reduce packaging, beginning with introducing network patch leads and fibre leads. This demonstrates our dedication to making significant strides in promoting efficient packaging practices and encourages customers to support us on our ESG mission by buying these ESG products in bulk where possible. Customers will contribute to substantially reducing their packaging waste and decrease transportation-related emissions.

Managing Director Peter Pearson stated, *"Sustainability is no longer a choice; it is a necessity in business. At Cablenet, we understand the growing importance of environmental considerations. Our ESG products, rather than merely being part of the sales patter or "greenwashing" are a tangible action and commitment for customers seeking suppliers committed to sustainability benefits for their industries."*

Cablenet continuously adapts to industry needs while staying true to our core values. We believe it is our duty and corporate responsibility to minimise our industry's contribution to landfill sites.

The bulk packaging option is included in our portfolio of products. It is available through our website search option, so look for the ESG product logo and join us in our goal of a greener and more environmentally conscious future.

Look for the ESG Product logo throughout this product guide

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Network Patch Leads

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Inside this section...

A GUIDE TO OUR PART CODES

Cable Type		Colour		Length	
60	Cat6 U/UTP Flush Moulded	0	Pink	003	0.3m
62	Cat6 U/UTP Xover(4PR)	1	Grey	005	0.5m
65	Cat6a S/FTP LSOH Snagless	2	Red	010	1.0m
67	Cat5e U/UTP Flush Moulded	3	Green	015	1.5m
68	Cat6 F/UTP LSOH Snagless	4	Blue	020	2.0m
B67	Cat5e U/UTP Flush Moulded Brown	5	Yellow	025	2.5m
L60	Cat6 U/UTP LSOH Snagless	6	Black	030	3.0m
L67	Cat5e U/UTP LSOH Snagless	7	Violet	040	4.0m
SL65	Cat6a U/FTP Slim	8	White	050	5.0m
PE67	Cat5e U/UTP External PE	9	Orange	060	6.0m
PE60	Cat6 U/UTP External PE	0	Brown	070	7.0m
PE65	Cat6a U/UTP External PE			075	8.0m
				100	10m
				150	15m
				200	20m
				250	25m
				300	30m

Network Patch Leads Facts

Ethernet cables, Network cables, Category cables and Patch cables are generally all the same thing. Also the terms "patch cable" and "patch cord" are generally synonymous. We refer to them as Patch Leads. All are used on LANs design around the Category 5, 5e, 6 or 6a patch cable international specifications with varying network speeds. The selection of the appropriate patch cable for the intended network application and environment is very important to the performance of the entire network.

Patch Leads are critical to the operation of Networks and allow system performance to operate at the intended high speeds and bandwidth. A patch cable connects two electronic or optical devices to each other for signal routing. This is usually for network applications, to "patch" a signal from one hub, switch, or router to another hub, switch, or router are used to connect equipment in computer bays or racks, or to connect peripheral devices to the computer. As network cables are used for connecting a variety of network elements from Ethernet switches and Ethernet routers to computers, servers and other network items - if there is an Ethernet interface, they can be connected using Ethernet cables.

Patch leads have twisted wire pairs within an overall patch lead. Twisting the wires together enables the currents to balance, i.e. in one wire the current is moving in one direction, and in the other wire of the pair the current is going in the other, enabling the overall fields around the twisted pair to cancel. In this way, data can be transmitted over considerable lengths without the need for undue precautions. The number of twisted per unit length is arranged to be different for each pair - the rate being based on prime numbers so that no two twists ever align and all four twisted pairs are layer up with difference Twisted lengths .This reduces crosstalk within the cable. The terminations can then be made to the required connector using a crimp tool.

Early network cables were unshielded, but as data speeds increased shielded versions were introduced to improve performance. For example, an unshielded twisted pair (UTP) cable may be satisfactory but a shielded cable is needed for Category 6a performance and is also more suitable for longer runs or where the cable passes through areas of high electrical noise. There are different methods that can be used for shielding Ethernet cables. The most common is to place a shield around each twisted pair. This not only provides shielding for the cable externally, but also reduces crosstalk between the internal twisted pairs as well.

Categories & Classes

Component		Link/Channel		Frequency	Application
TIA	ISO/EN	TIA	ISO/EN		
Cat5e	Cat5e	Cat5e	Class D	100 MHz	1G Base-T
Cat6	Cat6	Cat6	Class E	250 MHz	1G Base-T
Cat6a	Cat6$_A$	Cat6a	Class E$_A$	500 MHz	10G Base-T
	Cat7		Class F	600 MHz	10G Base-T
	Cat7$_A$		Class F$_A$	1000 MHz	10G Base-T
	Cat8		Class F$_A$	2000 MHz	up to 40G Base-T

Cat5e: This cable is defined in TIA/EIA-568 and has a slightly higher frequency specification than Cat5 and can be used for 100Base-T and 1000Base-t (Gigabit Ethernet).
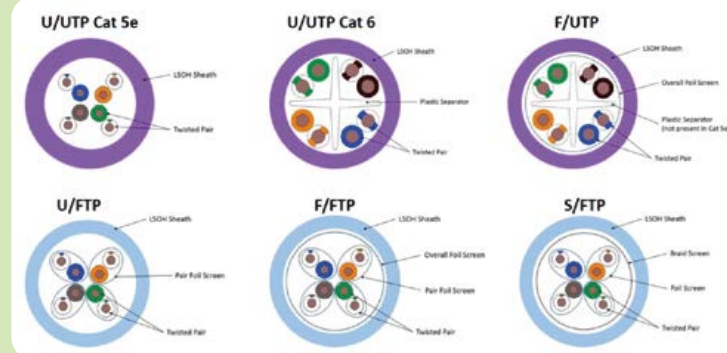
Cat6: This cable is defined in TIA/EIA-568-B and provides a significant improvement in performance over Cat5 and Cat5e. During manufacture Cat6 cables are more tightly wound than either Cat5 or Cat5e and can support speeds up to 10Gbps.
The Cat6 Ethernet cables generally have 2+ twists per cm and some may include a nylon spline to reduce crosstalk, although this is not actually required by the standard.

Cat6a: The "a" in Cat6a stands for "Augmented". The Cat6a cables are able to support twice the maximum bandwidth, and are capable of maintaining higher transmission speeds over longer network cable lengths. Cat6a cables utilise shielded to eliminate crosstalk for today's network applications and higher speed protocols such as 10GBASE-T.

Cat7: This is defined by ISO/IEC 11801 Class F cabling. It comprises four individually shielded pairs inside an overall shield. It is aimed at applications where transmission of frequencies up to 600 Mbps is required.

Cat8: These cables are designed for use in High performance 25 /40 GBASE-T Ethernet Networking applications up to a maximum length of 30M.

Cable Constructions

Copper cables used for structured cabling have 4 twisted pairs of wires but there are a number of different types of construction:

The ISO/IEC 11801 standard defines the different types of cable screen constructions as *X/YTP*, where *X* is the type of overall screen, *Y* is the type of screen around the twisted pairs and *TP* stands for *Twisted Pair*.

Some examples of typical cable constructions can be seen in the diagram to the right.

X can be:
 - U for Unscreened
 - F for Foil Screened
 - S for Braid Screen

Y can be:
 - U for Unscreened
 - F for Foil Screened

What is RJ45?

RJ45 is a type of modular connector which describes both male RJ45 plugs and female RJ45 sockets. The male plugs are also called 8P8C modular connectors and are attached to both ends of Ethernet cables.

The female sockets or jacks are embedded within the device and connected to a fixed wall outlet by the Ethernet cables. RJ45 is the interface used to connect computers, routers, switches, modems, and other network equipment.

RJ45 8P8C modular connectors are used for terminating Cat5e, Cat6 and Cat6a twisted-pair cables. The RJ45 modular connector is also fitted with a latch to prevent accidental disconnection.

For the RJ45 connector to work correctly, the eight individual wires must be arranged to match the correct pinout for the network configuration you're working on, either the T568A or T568B wiring standard. Both standards have unique colour coding, giving you two different types of connectivity.
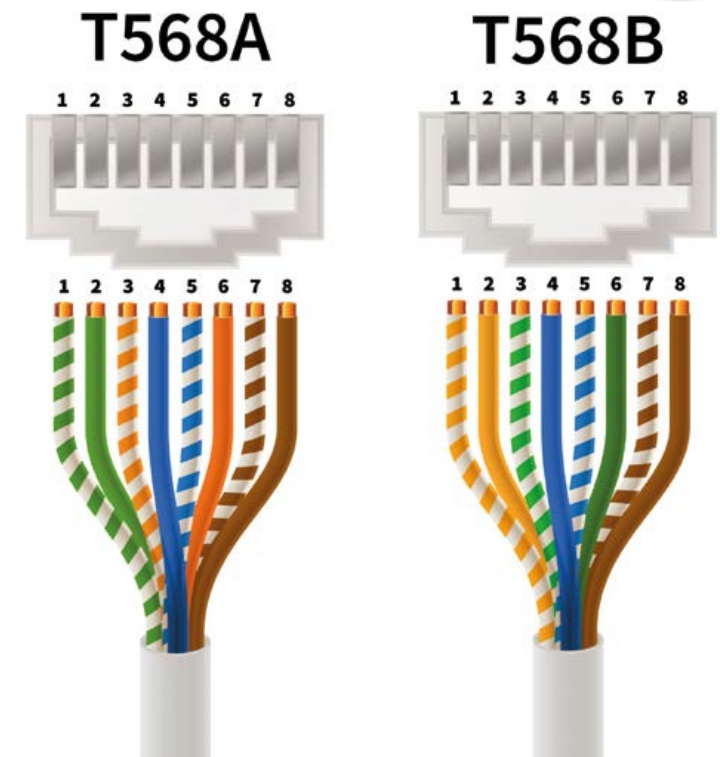
Standard colour codes for the RJ45

The two most popular pinouts are T568A and T568B. T568B has been widely adopted as the go-to wiring standard, although T568A may sometimes be used. The graphic on the right shows that the green and orange wires are crossed over. A patch lead has the same pinouts at both ends, whereas a crossover lead has T568A and T568B at each end. If you're unsure which of the two standards to use, it is recommended that you choose the T568B.

What's the difference between the T568A and T568B?

The application of T568B comes in its ability to connect HUBs, switches, and other devices, while T568A connects two pieces of hardware directly to each other without using a hub/router.

T568A is compatible with one or two pairs of USOC wiring schemes. On the other hand, T568B is compatible with only a single pair of USOC wiring schemes. However, T568B can match the AT&T 258A colour code.

T568A 1 2 3 4 5 6 7 8

T568B 1 2 3 4 5 6 7 8

MPTL (Modular Plug Terminated Link)

In a traditional network infrastructure, IP devices typically connect to the network by patch cords from outlets that are terminated to horizontal cables. For some devices, especially those mounted to a ceiling that tend to be permanently fixed, the traditional method is not always the most efficient. Devices such as PoE lights, security cameras and wireless access points can instead be connected directly via a standards-based modular plug-terminated link (MPTL), eliminating the faceplate, outlet, and patch cord. The MPTL reduces extra connection points and improves security by eliminating patch cords that can be easily disconnected.

MPTL's are built with infrastructure cable directly connecting the end device with the horizontal network infrastructure using an RJ45 plug on one end and an RJ45 jack on the patch panel side. This eliminates the need for an additional outlet and patch cord and speeds up deployment in the field.

The MPTL link method meets TIA 568.2-Dand ISO/IEC TR 11801-9910 ED1, see test on page 35.

Network Patch Leads

PART NO	DESCRIPTION

Cat6a Patch Leads

Cat6a S/FTP (Shielded) PoE++ Patch Leads

Cat6a S/FTP (Shielded) Patch Leads   PINK

PART NO	DESCRIPTION
65-0003	0.3m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0005	0.5m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0010	1m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0015	1.5m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0020	2m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0030	3m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0050	5m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0100	10m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0150	15m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-0200	20m Cat6a RJ45 Pink S/FTP LSOH 26AWG Snagless Booted Patch Lead

Cat6a S/FTP (Shielded) Patch Leads   GREY

PART NO	DESCRIPTION
65-1003	0.3m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1003B	0.3m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-1005	0.5m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1005B	0.5m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-1010	1m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1010B	1m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-1015	1.5m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1015B	1.5m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)

PART NO	DESCRIPTION
65-1020	2m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1020B	2m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-1030	3m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1050	5m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1050B	5m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 50)
65-1100	10m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1100B	10m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 50)
65-1150	15m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-1200	20m Cat6a RJ45 Grey S/FTP LSOH 26AWG Snagless Booted Patch Lead

Cat6a S/FTP (Shielded) Patch Leads   RED

PART NO	DESCRIPTION
65-2003	0.3m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2005	0.5m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2010	1m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2010B	1m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-2015	1.5m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2020	2m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2020B	2m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-2030	3m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2030B	3m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-2050	5m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2100	10m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2150	15m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-2200	20m Cat6a RJ45 Red S/FTP LSOH 26AWG Snagless Booted Patch Lead

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PART NO	DESCRIPTION
Cat6a S/FTP (Shielded) Patch Leads GREEN	
65-3003	0.3m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3005	0.5m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3010	1m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3010B	1m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-3015	1.5m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3020	2m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3020B	2m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-3030	3m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3050	5m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3100	10m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3150	15m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-3200	20m Cat6a RJ45 Green S/FTP LSOH 26AWG Snagless Booted Patch Lead
Cat6a S/FTP (Shielded) Patch Leads BLUE	
65-4003	0.3m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4005	0.5m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4005B	0.5m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-4010	1m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4010B	1m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-4015	1.5m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4015B	1.5m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-4020	2m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4020B	2m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-4030	3m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4030B	3m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-4050	5m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4100	10m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4150	15m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-4200	20m Cat6a RJ45 Blue S/FTP LSOH 26AWG Snagless Booted Patch Lead
Cat6a S/FTP (Shielded) Patch Leads YELLOW	
65-5003	0.3m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5005	0.5m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5005B	0.5m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)

PART NO	DESCRIPTION
65-5010	1m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5015	1.5m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5020	2m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5020B	2m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-5030	3m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5050	5m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5050B	5m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 50)
65-5100	10m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5150	15m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-5200	20m Cat6a RJ45 Yellow S/FTP LSOH 26AWG Snagless Booted Patch Lead
Cat6a S/FTP (Shielded) Patch Leads BLACK	
65-6003	0.3m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6003B	0.3m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-6005	0.5m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6005B	0.5m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-6010	1m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6010B	1m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-6015	1.5m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6020	2m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6030	3m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6030B	3m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-6050	5m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6100	10m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6150	15m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-6200	20m Cat6a RJ45 Black S/FTP LSOH 26AWG Snagless Booted Patch Lead
Cat6a S/FTP (Shielded) Patch Leads VIOLET	
65-7003	0.3m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7005	0.5m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7010	1m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7010B	1m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-7015	1.5m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7020	2m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7030	3m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead

ESG PRODUCT

POE++

Network Patch Leads

Cat6a S/FTP (Shielded) PoE++ | Cat6a U/FTP PoE++ Slimline

PART NO	DESCRIPTION
Cat6a Patch Leads > Cat6a S/FTP (Shielded) PoE++ Patch Leads	
65-7050	5m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7100	10m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7150	15m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-7200	20m Cat6a RJ45 Violet S/FTP LSOH 26AWG Snagless Booted Patch Lead

Cat6a S/FTP (Shielded) Patch Leads   WHITE

65-8003	0.3m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8003B	0.3m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-8005	0.5m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8005B	0.5m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-8010	1m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8010B	1m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-8015	1.5m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8020	2m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8020B	2m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-8030	3m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8030B	3m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead (PK 100)
65-8050	5m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8100	10m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8150	15m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-8200	20m Cat6a RJ45 White S/FTP LSOH 26AWG Snagless Booted Patch Lead

Cat6a S/FTP (Shielded) Patch Leads   ORANGE

65-9003	0.3m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9005	0.5m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9010	1m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9015	1.5m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9020	2m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9030	3m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9050	5m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9100	10m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9150	15m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead
65-9200	20m Cat6a RJ45 Orange S/FTP LSOH 26AWG Snagless Booted Patch Lead

ESG PRODUCT

PART NO	DESCRIPTION
Cat6a U/FTP PoE++ Slimline 30AWG Patch Leads	

Cat6a U/FTP Slimline Patch Leads   GREY

SL65-1002	0.25m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1003	0.3m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1005	0.5m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1010	1m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1015	1.5m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1020	2m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1025	2.5m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1030	3m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1040	4m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-1050	5m Cat6a RJ45 Grey U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead

Cat6a U/FTP Slimline Patch Leads   RED

SL65-2002	0.25m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2003	0.3m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2005	0.5m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2010	1m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2015	1.5m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2020	2m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2025	2.5m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2030	3m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2040	4m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-2050	5m Cat6a RJ45 Red U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead

Cat6a U/FTP Slimline Patch Leads   GREEN

SL65-3002	0.25m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3003	0.3m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3005	0.5m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3010	1m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3015	1.5m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3020	2m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3025	2.5m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3030	3m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3040	4m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-3050	5m Cat6a RJ45 Green U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead

CABLENET   Tel. 01276 405300   Email. sales@cablenet.co.uk   Web. www.cablenet.co.uk

Cat6a U/FTP PoE++ Slimline
Network Patch Leads

PART NO	DESCRIPTION
Cat6a U/FTP Slimline Patch Leads BLUE	
SL65-4002	0.25m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4003	0.3m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4005	0.5m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4010	1m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4015	1.5m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4020	2m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4025	2.5m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4030	3m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4040	4m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-4050	5m Cat6a RJ45 Blue U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6a U/FTP Slimline Patch Leads YELLOW	
SL65-5002	0.25m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5003	0.3m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5005	0.5m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5010	1m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5015	1.5m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5020	2m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5025	2.5m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5030	3m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5040	4m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-5050	5m Cat6a RJ45 Yellow U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6a U/FTP Slimline Patch Leads BLACK	
SL65-6002	0.25m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6003	0.3m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6005	0.5m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6010	1m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6015	1.5m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6020	2m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6025	2.5m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6030	3m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6040	4m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6050	5m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6070	7m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-6100	10m Cat6a RJ45 Black U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead

PART NO	DESCRIPTION
Cat6a U/FTP Slimline Patch Leads VIOLET	
SL65-7002	0.25m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7003	0.3m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7005	0.5m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7010	1m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7015	1.5m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7020	2m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7025	2.5m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7030	3m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7040	4m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-7050	5m Cat6a RJ45 Violet U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6a U/FTP Slimline Patch Leads WHITE	
SL65-8002	0.25m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8003	0.3m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8005	0.5m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8010	1m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8015	1.5m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8020	2m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8025	2.5m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8030	3m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8040	4m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-8050	5m Cat6a RJ45 White U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6a U/FTP Slimline Patch Leads ORANGE	
SL65-9002	0.25m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9003	0.3m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9005	0.5m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9010	1m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9015	1.5m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9020	2m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9025	2.5m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9030	3m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9040	4m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL65-9050	5m Cat6a RJ45 Orange U/FTP LSOH 30AWG Slim Snagless Booted Patch Lead

Network Patch Leads

Cat6a F/FTP PE External | Cat6 U/UTP LSOH PoE++

PART NO	DESCRIPTION

Cat6a F/FTP PE External Patch Leads

Cat6a F/FTP PE External Patch Leads   BLACK

PE65-6005	0.5m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6010	1m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6020	2m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6030	3m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6050	5m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6100	10m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6150	15m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6200	20m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6250	25m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6300	30m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6400	40m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6500	50m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6600	60m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6700	70m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead
PE65-6750	75m Cat6a RJ45 Black F/FTP PE External Solid Patch Lead

Cat7 (PIMF) Leads
are available upon request

Please contact our sales team for more details on 01276 405300.

PART NO	DESCRIPTION

Cat6 Patch Leads

Cat6 U/UTP LSOH PoE++ Patch Leads

Cat6 U/UTP LSOH Patch Leads   PINK

L60-0003	0.3m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0005	0.5m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0010	1m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0015	1.5m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0020	2m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0030	3m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0040	4m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0050	5m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0080	8m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0100	10m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0150	15m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-0200	20m Cat6 RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead

Cat6 U/UTP LSOH Patch Leads   GREY

L60-1002	0.2m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1003	0.3m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1003B	0.3m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-1005	0.5m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1010	1m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1010B	1m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-1015	1.5m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1015B	1.5m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-1020	2m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1020B	2m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-1025	2.5m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1025B	2.5m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-1030	3m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1040	4m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1050	5m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1080	8m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1100	10m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1150	15m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-1200	20m Cat6 RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead

ESG PRODUCT

PoE++

Tel. 01276 405300   Email. sales@cablenet.co.uk   Web. www.cablenet.co.uk

Cat6 U/UTP LSOH PoE++ — Network Patch Leads

PART NO	DESCRIPTION
Cat6 U/UTP LSOH Patch Leads RED	
L60-2003	0.3m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2005	0.5m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2010	1m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2010B	1m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-2015	1.5m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2020	2m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2025	2.5m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2030	3m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2040	4m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2050	5m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2080	8m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2100	10m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2150	15m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-2200	20m Cat6 RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP LSOH Patch Leads GREEN	
L60-3003	0.3m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3005	0.5m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3010	1m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3015	1.5m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3020	2m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3025	2.5m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3030	3m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3040	4m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3050	5m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3080	8m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3100	10m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3150	15m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-3200	20m Cat6 RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP LSOH Patch Leads BLUE	
L60-4002	0.2m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4003	0.3m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4005	0.5m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4005B	0.5m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-4010	1m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead

PART NO	DESCRIPTION
L60-4010B	1m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-4015	1.5m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4015B	1.5m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-4020	2m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4020B	2m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-4025	2.5m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4030	3m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4030B	3m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-4040	4m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4050	5m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4080	8m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4100	10m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4150	15m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-4200	20m Cat6 RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP LSOH Patch Leads YELLOW	
L60-5003	0.3m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5005	0.5m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5010	1m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5015	1.5m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5020	2m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5020B	2m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-5025	2.5m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5030	3m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5040	4m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5050	5m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5080	8m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5100	10m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5150	15m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-5200	20m Cat6 RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP LSOH Patch Leads BLACK	
L60-6003	0.3m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6003B	0.3m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-6005	0.5m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6010	1m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6010B	1m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)

Network Patch Leads

Cat6 U/UTP LSOH PoE++ | Cat6 U/UTP PVC PoE++

PART NO	DESCRIPTION
Cat6 Patch Leads > **Cat6 U/UTP LSOH PoE++ Patch Leads**	
L60-6015	1.5m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6015B	1.5m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-6020	2m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6020B	2m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-6030	3m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6040	4m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6050	5m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6080	8m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6100	10m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6150	15m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-6200	20m Cat6 RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP LSOH Patch Leads VIOLET	
L60-7003	0.3m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7005	0.5m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7005B	0.5m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-7010	1m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7010B	1m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-7015	1.5m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7020	2m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7030	3m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7040	4m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7050	5m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7080	8m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7100	10m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7150	15m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-7200	20m Cat6 RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP LSOH Patch Leads WHITE	
L60-8003	0.3m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8005	0.5m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8005B	0.5m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-8010	1m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8010B	1m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-8015	1.5m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8015B	1.5m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)

PART NO	DESCRIPTION
L60-8020	2m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8020B	2m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-8030	3m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8030B	3m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-8040	4m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8050	5m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8050B	5m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 50)
L60-8080	8m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8100	10m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8150	15m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-8200	20m Cat6 RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP LSOH Patch Leads ORANGE	
L60-9003	0.3m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9005	0.5m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9010	1m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9010B	1m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-9015	1.5m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9020	2m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9020B	2m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L60-9030	3m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9040	4m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9050	5m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9080	8m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9100	10m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9150	15m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L60-9200	20m Cat6 RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat6 U/UTP PVC PoE++ Patch Leads	
Cat6 U/UTP PVC Patch Leads PINK	
60-0003	0.3m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0005	0.5m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0010	1m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0015	1.5m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0020	2m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0030	3m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0040	4m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

ESG PRODUCT

PoE++

CABLENET   Tel. 01276 405300   Email. sales@cablenet.co.uk   Web. www.cablenet.co.uk

Cat6 U/UTP PVC PoE++

Network Patch Leads

PART NO	DESCRIPTION
Cat6 Patch Leads > Cat6 U/UTP PVC PoE++ Patch Leads	
60-0050	5m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0080	8m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0100	10m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0150	15m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0200	20m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-0300	30m Cat6 RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat6 U/UTP PVC Patch Leads   GREY

60-1003	0.3m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1003B	0.3m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-1005	0.5m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1005B	0.5m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-1007	0.75m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1010	1m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1010B	1m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-1015	1.5m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1015B	1.5m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-1020	2m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1020B	2m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-1025	2.5m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1030	3m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1030B	3m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-1040	4m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1050	5m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1050B	5m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 50)
60-1080	8m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1100	10m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1150	15m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1200	20m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-1300	30m Cat6 RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat6 U/UTP PVC Patch Leads   RED

60-2003	0.3m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2003B	0.3m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-2005	0.5m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2005B	0.5m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)

PART NO	DESCRIPTION
60-2010	1m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2010B	1m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-2015	1.5m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2020	2m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2025	2.5m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2030	3m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2040	4m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2050	5m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2050B	5m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 50)
60-2080	8m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2100	10m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2150	15m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2200	20m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-2300	30m Cat6 RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat6 U/UTP PVC Patch Leads   GREEN

60-3003	0.3m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3003B	0.3m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-3005	0.5m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3005B	0.5m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-3010	1m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3010B	1m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-3015	1.5m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3020	2m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3020B	2m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-3025	2.5m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3030	3m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3040	4m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3050	5m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3080	8m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3100	10m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3150	15m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3200	20m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-3300	30m Cat6 RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

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PoE++

Network Patch Leads

Cat6 U/UTP PVC PoE++

PART NO	DESCRIPTION
Cat6 U/UTP PVC Patch Leads — BLUE	
60-4003	0.3m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4003B	0.3m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-4005	0.5m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4005B	0.5m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-4010	1m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4010B	1m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-4015	1.5m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4020	2m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4020B	2m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-4025	2.5m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4030	3m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4040	4m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4050	5m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4080	8m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4100	10m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4150	15m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4200	20m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-4300	30m Cat6 RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat6 U/UTP PVC Patch Leads — YELLOW	
60-5003	0.3m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5003B	0.3m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-5005	0.5m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5005B	0.5m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-5010	1m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5010B	1m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-5015	1.5m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5015B	1.5m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-5020	2m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5020B	2m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-5025	2.5m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5030	3m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5040	4m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5050	5m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

PART NO	DESCRIPTION
60-5080	8m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5100	10m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5150	15m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5200	20m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-5300	30m Cat6 RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat6 U/UTP PVC Patch Leads — BLACK	
60-6003	0.3m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6003B	0.3m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-6005	0.5m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6005B	0.5m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-6010	1m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6010B	1m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-6015	1.5m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6015B	1.5m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-6020	2m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6020B	2m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-6030	3m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6030B	3m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-6040	4m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6050	5m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6050B	5m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 50)
60-6080	8m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6100	10m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6150	15m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6200	20m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-6300	30m Cat6 RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat6 U/UTP PVC Patch Leads — VIOLET	
60-7003	0.3m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7005	0.5m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7010	1m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7015	1.5m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7020	2m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7030	3m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7040	4m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

ESG PRODUCT

POE++

CABLENET Tel. 01276 405300 Email. sales@cablenet.co.uk Web. www.cablenet.co.uk

Cat6 U/UTP PVC PoE++ | Cat6 F/UTP (Shielded)   Network Patch Leads

PART NO	DESCRIPTION

Cat6 Patch Leads > Cat6 U/UTP PVC PoE++ Patch Leads

60-7050	5m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7080	8m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7100	10m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7150	15m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7200	20m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-7300	30m Cat6 RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat6 U/UTP PVC Patch Leads   WHITE

60-8003	0.3m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8003B	0.3m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-8005	0.5m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8005B	0.5m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-8010	1m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8010B	1m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-8015	1.5m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8015B	1.5m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-8020	2m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8020B	2m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-8030	3m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8040	4m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8050	5m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8050B	5m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 50)
60-8080	8m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8100	10m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8150	15m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8200	20m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-8300	30m Cat6 RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat6 U/UTP PVC Patch Leads   ORANGE

60-9003	0.3m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9005	0.5m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9005B	0.5m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-9010	1m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9015	1.5m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9020	2m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9020B	2m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
60-9030	3m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

ESG PRODUCT

PART NO	DESCRIPTION
60-9040	4m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9050	5m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9080	8m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9100	10m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9150	15m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9200	20m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
60-9300	30m Cat6 RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

ESG PRODUCT

Cat6 U/UTP Crossover Patch Leads available
Please contact our sales team for more details.

Cat6 F/UTP (Shielded) Patch Leads

Cat6 F/UTP (Shielded) Patch Leads   GREY

68-1005	0.5m Cat6 RJ45 Grey F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-1010	1m Cat6 RJ45 Grey F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-1020	2m Cat6 RJ45 Grey F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-1030	3m Cat6 RJ45 Grey F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-1050	5m Cat6 RJ45 Grey F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-1100	10m Cat6 RJ45 Grey F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-1200	20m Cat6 RJ45 Grey F/UTP LSOH 26AWG Snagless Booted Patch Lead

Cat6 F/UTP (Shielded) Patch Leads   RED

68-2005	0.5m Cat6 RJ45 Red F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-2010	1m Cat6 RJ45 Red F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-2020	2m Cat6 RJ45 Red F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-2030	3m Cat6 RJ45 Red F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-2050	5m Cat6 RJ45 Red F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-2100	10m Cat6 RJ45 Red F/UTP LSOH 26AWG Snagless Booted Patch Lead

Cat6 F/UTP (Shielded) Patch Leads   GREEN

68-3005	0.5m Cat6 RJ45 Green F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-3010	1m Cat6 RJ45 Green F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-3020	2m Cat6 RJ45 Green F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-3030	3m Cat6 RJ45 Green F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-3050	5m Cat6 RJ45 Green F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-3100	10m Cat6 RJ45 Green F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-3200	20m Cat6 RJ45 Green F/UTP LSOH 26AWG Snagless Booted Patch Lead

Network Patch Leads   Cat6 F/UTP (Shielded) | Cat6 U/UTP PE External | Cat6 U/UTP PoE++ Slimline Patch Leads

PART NO	DESCRIPTION
Cat6 F/UTP (Shielded) Patch Leads BLUE	
68-4005	0.5m Cat6 RJ45 Blue F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-4010	1m Cat6 RJ45 Blue F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-4020	2m Cat6 RJ45 Blue F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-4030	3m Cat6 RJ45 Blue F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-4050	5m Cat6 RJ45 Blue F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-4100	10m Cat6 RJ45 Blue F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-4200	20m Cat6 RJ45 Blue F/UTP LSOH 26AWG Snagless Booted Patch Lead
Cat6 F/UTP (Shielded) Patch Leads YELLOW	
68-5005	0.5m Cat6 RJ45 Yellow F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-5010	1m Cat6 RJ45 Yellow F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-5020	2m Cat6 RJ45 Yellow F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-5030	3m Cat6 RJ45 Yellow F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-5050	5m Cat6 RJ45 Yellow F/UTP LSOH 26AWG Snagless Booted Patch Lead
68-5100	10m Cat6 RJ45 Yellow F/UTP LSOH 26AWG Snagless Booted Patch Lead

Cat6 U/UTP PE External Patch Leads

PART NO	DESCRIPTION
Cat6 U/UTP PE External Patch Leads BLACK	
PE60-6005	0.5m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6010	1m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6020	2m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6030	3m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6050	5m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6100	10m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6150	15m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6200	20m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6250	25m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6300	30m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6400	40m Cat6 RJ45 Black U/UTP PE External Solid Patch Shield
PE60-6500	50m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6600	60m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6700	70m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead
PE60-6750	75m Cat6 RJ45 Black U/UTP PE External Solid Patch Lead

PART NO	DESCRIPTION
Cat6 U/UTP PoE++ Slimline 30AWG Patch Leads	
Cat6 U/UTP Slimline Patch Leads GREY	
SL60-1002	0.25m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1003	0.3m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1005	0.5m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1010	1m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1015	1.5m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1020	2m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1025	2.5m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1030	3m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1040	4m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-1050	5m Cat6 RJ45 Grey U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6 U/UTP Slimline Patch Leads RED	
SL60-2002	0.25m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2003	0.3m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2005	0.5m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2010	1m Cat6 RJ45 red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2015	1.5m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2020	2m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2025	2.5m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2030	3m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-2040	4m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch lead
SL60-2050	5m Cat6 RJ45 Red U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6 U/UTP Slimline Patch Leads GREEN	
SL60-3002	0.3m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3005	0.5m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3010	1m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3015	1.5m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3020	2m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3025	2.5m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3030	3m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3040	4m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-3050	5m Cat6 RJ45 Green U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead

CABLENET

Tel. 01276 405300   Email. sales@cablenet.co.uk   Web. www.cablenet.co.uk

Cat6 U/UTP PoE++ Slimline Patch Leads

Network Patch Leads

PART NO	DESCRIPTION
Cat6 U/UTP Slimline Patch Leads BLUE	
SL60-4002	0.25m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4003	0.3m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4005	0.5m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4010	1m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4015	1.5m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4020	2m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4025	2.5m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4030	3m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-4040	4m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch lead
SL60-4050	5m Cat6 RJ45 Blue U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6 U/UTP Slimline Patch Leads YELLOW	
SL60-5002	0.25m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5003	0.3m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5005	0.5m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5010	1m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5015	1.5m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5020	2m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5025	2.5m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5030	3m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5040	4m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-5050	5m Cat6 RJ45 Yellow U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6 U/UTP Slimline Patch Leads BLACK	
SL60-6002	0.25m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6003	0.3m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6005	0.5m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6010	1m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6015	1.5m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6020	2m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6025	2.5m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6030	3m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6040	4m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-6050	5m Cat6 RJ45 Black U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead

PART NO	DESCRIPTION
Cat6 U/UTP Slimline Patch Leads VIOLET	
SL60-7002	0.25m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7003	0.3m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7005	0.5m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7010	1m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7015	1.5m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7020	2m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7025	2.5m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7030	3m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7040	4m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-7050	5m Cat6 RJ45 Violet U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6 U/UTP Slimline Patch Leads WHITE	
SL60-8002	0.25m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8003	0.3m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8005	0.5m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8010	1m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8015	1.5m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8020	2m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8025	2.5m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8030	3m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8040	4m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-8050	5m Cat6 RJ45 White U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
Cat6 U/UTP Slimline Patch Leads ORANGE	
SL60-9002	0.25m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9003	0.3m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9005	0.5m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9010	1m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9015	1.5m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Leads
SL60-9020	2m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9025	2.5m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9030	3m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9040	4m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead
SL60-9050	5m Cat6 RJ45 Orange U/UTP LSOH 30AWG Slim Snagless Booted Patch Lead

Network Patch Leads

Cat5e U/UTP LSOH

PART NO	DESCRIPTION

Cat5e Patch Leads

Cat5e U/UTP LSOH Patch Leads

Cat5e U/UTP LSOH Patch Leads   PINK

L67-0005	0.5m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-0010	1m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-0020	2m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-0030	3m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-0040	4m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-0050	5m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-0080	8m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-0100	10m Cat5e RJ45 Pink U/UTP LSOH 24AWG Snagless Booted Patch Lead

Cat5e U/UTP LSOH Patch Leads   GREY

L67-1005	0.5m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1010	1m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1020	2m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1025	2.5m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1030	3m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1040	4m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1050	5m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1080	8m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-1100	10m Cat5e RJ45 Grey U/UTP LSOH 24AWG Snagless Booted Patch Lead

Cat5e U/UTP LSOH Patch Leads   RED

L67-2005	0.5m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2010	1m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2020	2m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2025	2.5m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2030	3m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2040	4m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2050	5m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2080	8m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-2100	10m Cat5e RJ45 Red U/UTP LSOH 24AWG Snagless Booted Patch Lead

PART NO	DESCRIPTION

Cat5e U/UTP LSOH Patch Leads   GREEN

L67-3005	0.5m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3010	1m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3020	2m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3025	2.5m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3030	3m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3040	4m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3050	5m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3080	8m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-3100	10m Cat5e RJ45 Green U/UTP LSOH 24AWG Snagless Booted Patch Lead

Cat5e U/UTP LSOH Patch Leads   BLUE

L67-4005	0.5m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4010	1m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4020	2m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4025	2.5m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4030	3m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4040	4m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4050	5m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4080	8m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-4100	10m Cat5e RJ45 Blue U/UTP LSOH 24AWG Snagless Booted Patch Lead

Cat5e U/UTP LSOH Patch Leads   YELLOW

L67-5005	0.5m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5010	1m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5020	2m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5025	2.5m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5030	3m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5040	4m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5050	5m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5080	8m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-5100	10m Cat5e RJ45 Yellow U/UTP LSOH 24AWG Snagless Booted Patch Lead

Cat5e U/UTP LSOH | Cat5e U/UTP PVC

Network Patch Leads

PART NO	DESCRIPTION
Cat5e U/UTP LSOH Patch Leads — BLACK	
L67-6005	0.5m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-6010	1m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-6010B	1m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L67-6020	2m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-6030	3m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-6040	4m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-6050	5m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-6080	8m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-6100	10m Cat5e RJ45 Black U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat5e U/UTP LSOH Patch Leads — VIOLET	
L67-7005	0.5m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-7010	1m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-7020	2m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-7030	3m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-7040	4m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-7050	5m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-7080	8m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-7100	10m Cat5e RJ45 Violet U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat5e U/UTP LSOH Patch Leads — WHITE	
L67-8005	0.5m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-8010	1m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-8010B	1m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead (PK 100)
L67-8020	2m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-8030	3m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-8040	4m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-8050	5m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-8080	8m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-8100	10m Cat5e RJ45 White U/UTP LSOH 24AWG Snagless Booted Patch Lead
Cat5e U/UTP LSOH Patch Leads — ORANGE	
L67-9005	0.5m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-9010	1m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-9020	2m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead

PART NO	DESCRIPTION
L67-9030	3m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-9040	4m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-9050	5m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-9080	8m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead
L67-9100	10m Cat5e RJ45 Orange U/UTP LSOH 24AWG Snagless Booted Patch Lead

Cat5e U/UTP PVC Patch Leads

PART NO	DESCRIPTION
Cat5e U/UTP PVC Patch Leads — PINK	
67-0003	0.3m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0005	0.5m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0010	1m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0015	1.5m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0020	2m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0030	3m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0040	4m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0050	5m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0060	6m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0070	7m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0075	8m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0100	10m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0150	15m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0200	20m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-0300	30m Cat5e RJ45 Pink U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat5e U/UTP PVC Patch Leads — GREY	
67-1003	0.3m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1003B	0.3m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-1005	0.5m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1005B	0.5m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-1010	1m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1015	1.5m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1015B	1.5m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-1020	2m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1025	2.5m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1030	3m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Network Patch Leads

Cat5e U/UTP PVC

PART NO	DESCRIPTION
Cat5e Patch Leads > Cat5e U/UTP PVC Patch Leads	
67-1030B	3m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-1040	4m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1050	5m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1060	6m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1070	7m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1075	8m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1100	10m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1150	15m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1200	20m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1250	25m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-1300	30m Cat5e RJ45 Grey U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat5e U/UTP PVC Patch Leads RED	
67-2003	0.3m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2003B	0.3m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-2005	0.5m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2005B	0.5m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-2010	1m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2015	1.5m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2020	2m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2025	2.5m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2030	3m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2040	4m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2050	5m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2060	6m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2070	7m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2075	8m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2100	10m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2150	15m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2200	20m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-2300	30m Cat5e RJ45 Red U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

PART NO	DESCRIPTION
Cat5e U/UTP PVC Patch Leads GREEN	
67-3003	0.3m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3003B	0.3m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-3005	0.5m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3005B	0.5m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch lead (PK 100)
67-3010	1m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3010B	1m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-3015	1.5m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3020	2m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3025	2.5m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3030	3m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3040	4m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3050	5m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3060	6m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3070	7m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3100	10m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3150	15m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3200	20m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-3300	30m Cat5e RJ45 Green U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat5e U/UTP PVC Patch Leads BLUE	
67-4003	0.3m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4003B	0.3m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-4005	0.5m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4010	1m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4010B	1m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-4015	1.5m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4020	2m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4025	2.5m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4030	3m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4030B	3m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-4040	4m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

ESG PRODUCT

CABLENET   Tel. **01276 405300**   Email. **sales@cablenet.co.uk**   Web. **www.cablenet.co.uk**

Cat5e U/UTP PVC Network Patch Leads

PART NO	DESCRIPTION
Cat5e Patch Leads > Cat5e U/UTP PVC Patch Leads	
67-4050	5m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4060	6m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4070	7m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4075	8m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4100	10m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4150	15m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4200	20m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-4300	30m Cat5e RJ45 Blue U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat5e U/UTP PVC Patch Leads   YELLOW

PART NO	DESCRIPTION
67-5003	0.3m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5005	0.5m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5010	1m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5015	1.5m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5015B	1.5m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch lead (PK 100)
67-5020	2m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5025	2.5m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5030	3m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5040	4m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5050	5m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5060	6m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5070	7m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5075	8m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5100	10m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5150	15m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5200	20m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-5300	30m Cat5e RJ45 Yellow U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat5e U/UTP PVC Patch Leads   BLACK

PART NO	DESCRIPTION
67-6002	0.25m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6003	0.3m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6003B	0.3m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-6005	0.5m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

PART NO	DESCRIPTION
67-6010	1m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6015	1.5m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6020	2m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6030	3m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6040	4m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6050	5m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6050B	5m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 50)
67-6060	6m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6070	7m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6075	8m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6100	10m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6150	15m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6200	20m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-6300	30m Cat5e RJ45 Black U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat5e U/UTP PVC Patch Leads   VIOLET

PART NO	DESCRIPTION
67-7003	0.3m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7005	0.5m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7005B	0.5m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-7010	1m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7010B	1m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch lead (PK 100)
67-7015	1.5m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7020	2m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7030	3m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7040	4m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7050	5m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7060	6m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7070	7m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7075	8m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7100	10m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7150	15m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7200	20m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-7300	30m Cat5e RJ45 Violet U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Network Patch Leads

Cat5e U/UTP PVC

PART NO	DESCRIPTION
Cat5e U/UTP PVC Patch Leads WHITE	
67-8003	0.3m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8003B	0.3m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-8005	0.5m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8010	1m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8015	1.5m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8020	2m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8020B	2m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-8030	3m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8030B	3m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-8040	4m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8050	5m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8060	6m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8070	7m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8075	8m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8100	10m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8150	15m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8200	20m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-8300	30m Cat5e RJ45 White U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat5e U/UTP PVC Patch Leads ORANGE	
67-9003	0.3m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9003B	0.3m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-9005	0.5m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9010	1m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9010B	1m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead (PK 100)
67-9015	1.5m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9020	2m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9030	3m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9040	4m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9050	5m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9060	6m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9070	7m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9075	8m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

PART NO	DESCRIPTION
67-9100	10m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9150	15m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9200	20m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
67-9300	30m Cat5e RJ45 Orange U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
Cat5e U/UTP PVC Patch Leads BROWN	
B67-0005	0.5m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
B67-0010	1m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
B67-0015	1.5m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
B67-0020	2m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
B67-0030	3m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
B67-0050	5m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
B67-0100	10m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead
B67-0200	20m Cat5e RJ45 Brown U/UTP PVC 24AWG Flush Moulded Booted Patch Lead

Cat5e U/UTP PE External Patch Leads

Cat5e U/UTP PE External Patch Leads BLACK	
PE67-6005	0.5m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6010	1m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6020	2m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6030	3m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6050	5m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6100	10m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6150	15m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6200	20m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6250	25m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6300	30m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6350	35m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6400	40m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6450	45m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6500	50m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6600	60m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6700	70m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead
PE67-6750	75m Cat5e RJ45 Black U/UTP PE External Flush Moulded Solid Patch Lead

ESG PRODUCT

ESG PRODUCT

PART NO	DESCRIPTION

IP67 XXtreme Network Patch Leads

- These Ruggedized modular patch cords and outlets provide an IP67-rated seal, protecting plug and outlet contacts from dust, moisture, vibration and common cleaning chemicals.
- Made to order, these cables are ideal for protecting valuable connections in harsh environments.
- Wiring configuration to 568-B.

Cat6a F/FTP PE External Patch Leads

XE65-6010	1m Cat6a RJ45 Black F/FTP IP67 XXtreme Solid Patch Lead
XE65-6100	10m Cat6a RJ45 Black F/FTP IP67 XXtreme Solid Patch Lead

Cat6 U/UTP PE External Patch Leads

XE60-6010	1m Cat6 RJ45 Black U/UTP IP67 XXtreme Solid Patch Lead
XE60-6100	10m Cat6 RJ45 Black U/UTP IP67 XXtreme External Solid Patch Lead

Cat5e U/UTP PE External Patch Leads

XE67-6010	1m Cat5e RJ45 Black U/UTP IP67 XXtreme External Solid Patch Lead
XE67-6100	10m Cat5e RJ45 Black U/UTP IP67 XXtreme External Solid Patch Lead

These cables are made to order, please contact our sales team for more information.

Cat8 Patch Leads

ULTIMATE 40G Cat8 5G S/FTP LSOH 24AWG Dual Colour Patch Leads   AQUA

88-AQ003	0.3m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead
88-AQ005	0.5m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead
88-AQ010	1m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead
88-AQ015	1.5m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead
88-AQ020	2m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead
88-AQ030	3m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead
88-AQ050	5m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead
88-AQ100	10m **ULTIMATE** 40G Cat8 **5G** Aqua S/FTP LSOH 24AWG Snagless Patch Lead

We can manufacture many custom made power cable assemblies in our

IN-HOUSE WORKSHOP

See page 92 for more details

Network Patch Leads

PatchSee ThinPatch Cat6a

™PatchSee®
Optical Technology

Cablenet's PatchSee is a solution that is unique, exclusive and efficient

Given these needs, the PatchSee solution was designed from the outset to meet the expectations of network designers and managers in terms of efficiency, performance and security. With PatchSee, your network management benefits from an exclusive technology that lets you identify data connections and strategic links quickly and efficiently.

Today, over 7 million PatchSee Optical Technology products are up and running around the world, proving both the market need and PatchSee performance in many fields. Compatible with all existing network hardware, PatchSee offers unparalleled ease-of-use, security and speed during maintenance and troubleshooting operations for data centers, computer rooms, network racks and more.

PART NO	DESCRIPTION
ThinPatch Cat6a	
ThinPATCH U/UTP Cat6a Patch Lead	
PSTP6A-U-2	PatchSee ThinPATCH Cat6a 0.6m U/UTP Intelligent Patch Lead
PSTP6A-U-3	PatchSee ThinPATCH Cat6a 0.9m U/UTP Intelligent Patch Lead
PSTP6A-U-4	PatchSee ThinPATCH Cat6a 1.2m U/UTP Intelligent Patch Lead
PSTP6A-U-5	PatchSee ThinPATCH Cat6a 1.5m U/UTP Intelligent Patch Lead
PSTP6A-U-6	PatchSee ThinPATCH Cat6a 1.8m U/UTP Intelligent Patch Lead
PSTP6A-U-7	PatchSee ThinPATCH Cat6a 2.1m U/UTP Intelligent Patch Lead
PSTP6A-U-8	PatchSee ThinPATCH Cat6a 2.4m U/UTP Intelligent Patch Lead
PSTP6A-U-9	PatchSee ThinPATCH Cat6a 2.7m U/UTP Intelligent Patch Lead
PSTP6A-U-10	PatchSee ThinPATCH Cat6a 3.1m U/UTP Intelligent Patch Lead
PSTP6A-U-13	PatchSee ThinPATCH Cat6a 4m U/UTP Intelligent Patch Lead
PSTP6A-U-16	PatchSee ThinPATCH Cat6a 4.9m U/UTP Intelligent Patch Lead
ThinPATCH U/FTP Cat6a Patch Lead	
PSTP6A-F-2	PatchSee ThinPATCH Cat6a 0.6m U/FTP Intelligent Patch Lead
PSTP6A-F-3	PatchSee ThinPATCH Cat6a 0.9m U/FTP Intelligent Patch Lead
PSTP6A-F-4	PatchSee ThinPATCH Cat6a 1.2m U/FTP Intelligent Patch Lead
PSTP6A-F-5	PatchSee ThinPATCH Cat6a 1.5m U/FTP Intelligent Patch Lead
PSTP6A-F-6	PatchSee ThinPATCH Cat6a 1.8m U/FTP Intelligent Patch Lead
PSTP6A-F-7	PatchSee ThinPATCH Cat6a 2.1m U/FTP Intelligent Patch Lead
PSTP6A-F-8	PatchSee ThinPATCH Cat6a 2.4m U/FTP Intelligent Patch Lead
PSTP6A-F-9	PatchSee ThinPATCH Cat6a 2.7m U/FTP Intelligent Patch Lead
PSTP6A-F-10	PatchSee ThinPATCH Cat6a 3.1m U/FTP Intelligent Patch Lead
PSTP6A-F-13	PatchSee ThinPATCH Cat6a 4m U/FTP Intelligent Patch Lead
PSTP6A-F-16	PatchSee ThinPATCH Cat6a 4.9m U/FTP Intelligent Patch Lead

PatchSee

Optical Technology

PatchSee Cat6a | PatchSee Cat6 | PatchSee Cat5e | PatchSee Tools | PatchSee Clips

Network Patch Leads

PART NO	DESCRIPTION

PatchSee Cat6a

DirectPatch U/UTP Patch Lead PVC

PSPCI6-U-2	PatchSee DirectPatch 0.6m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-3	PatchSee DirectPatch 0.9m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-4	PatchSee DirectPatch 1.2m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-5	PatchSee DirectPatch 1.5m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-6	PatchSee DirectPatch 1.8m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-7	PatchSee DirectPatch 2.1m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-9	PatchSee DirectPatch 2.7m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-10	PatchSee DirectPatch 3.1m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-U-16	PatchSee DirectPatch 4.9m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-DPU-20	PatchSee DirectPatch 6.1m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-DPU-32	PatchSee DirectPatch 9.7m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-DPU-40	PatchSee DirectPatch 12.2m Cat6a U/UTP PVC Intelligent Patch Lead
PSPCI6-DPU-50	PatchSee DirectPatch 15.2m Cat6a U/UTP PVC Intelligent Patch Lead

DirectPatch U/FTP Patch Lead LSOH

PSPCI6F-3	PatchSee DirectPatch 0.9m Cat6a U/FTP LSOH Intelligent Patch Lead
PSPCI6F-4	PatchSee DirectPatch 1.2m Cat6a U/FTP LSOH Intelligent Patch Lead
PSPCI6F-6	PatchSee DirectPatch 1.8m Cat6a U/FTP LSOH Intelligent Patch Lead
PSPCI6F-10	PatchSee DirectPatch 3.1m Cat6a U/FTP LSOH Intelligent Patch Lead
PSPCI6F-16	PatchSee DirectPatch 4.9m Cat6a U/FTP LSOH Intelligent Patch Lead

PatchSee Cat6

Class6Patch U/UTP Patch Lead PVC

PS6U-2	PatchSee Class6Patch 0.6m Cat6 U/UTP PVC Intelligent Patch Lead
PS6U-4	PatchSee Class6Patch 1.2m Cat6 U/UTP PVC Intelligent Patch Lead
PS6U-5	PatchSee Class6Patch 1.5m Cat6 U/UTP PVC Intelligent Patch Lead
PS6U-7	PatchSee Class6Patch 2.1m Cat6 U/UTP PVC Intelligent Patch Lead
PS6U-10	PatchSee Class6Patch 3.1m Cat6 U/UTP PVC Intelligent Patch Lead
PS6U-16	PatchSee Class6Patch 4.9m Cat6 U/UTP PVC Intelligent Patch Lead

PART NO	DESCRIPTION

Class6Patch U/FTP Patch Lead LSOH

PS6F-4	PatchSee Class6Patch 1.2m Cat6 U/FTP LSOH Intelligent Patch Lead
PS6F-7	PatchSee Class6Patch 2.1m Cat6 U/FTP LSOH Intelligent Patch Lead
PS6F-16	PatchSee Class6Patch 4.9m Cat6 U/FTP LSOH Intelligent Patch Lead

PatchSee Cat5e

BasicPatch U/UTP Patch Lead PVC

PSU-2	PatchSee BasicPatch 0.6m Cat5e U/UTP PVC Intelligent Patch Lead
PSU-4	PatchSee BasicPatch 1.2m Cat5e U/UTP PVC Intelligent Patch Lead
PSU-5	PatchSee BasicPatch 1.5m Cat5e U/UTP PVC Intelligent Patch Lead
PSU-7	PatchSee BasicPatch 2.1m Cat5e U/UTP PVC Intelligent Patch Lead
PSU-10	PatchSee BasicPatch 3.1m Cat5e U/UTP PVC Intelligent Patch Lead
PSU-16	PatchSee BasicPatch 4.9m Cat5e U/UTP PVC Intelligent Patch Lead

BasicPatch U/FTP Patch Lead LSOH

PSF-2	PatchSee BasicPatch 0.6m Cat5e U/FTP LSOH Intelligent Patch Lead

PatchSee Tools

PSRO-PRO-PL	PatchSee Pro Patchlight Red
PSBL-PRO-PL	PatchSee Pro Patchlight White

PatchSee Clips

PSFU-PC	PatchSee Purple PatchClip (PK 50)
PSGM-PC	PatchSee Grey PatchClip (PK 50)
PSJA-PC	PatchSee Yellow PatchClip (PK 50)
PSOR-PC	PatchSee Orange PatchClip (PK 50)
PSRF-PC	PatchSee Pink PatchClip (PK 50)
PSRO-PC	PatchSee Red PatchClip (PK 50)

SPE Single Pair Ethernet

Single pair Ethernet (SPE) utilizes one twisted pair to transmit data at speeds of up to 1 Gbps and deliver up to 50 watts of dc power via Power over Data Lines (PoDL). Single pair Ethernet supports low power and low data over very long distances, up to 1000 meters and higher speeds and higher power up to 40 meters.

One major advantage of deploying single pair Ethernet resides in how the unified communications protocol functions. This allows for the collection and sharing of sensor information. As a result, machine-to-machine communications can manipulate actuators and perform other actions in enterprise buildings and manufacturing facilities.

Through PoDL, SPE delivers continuous, reliable dc power that eliminates batteries and separate powering circuits for the device. In addition, its Ethernet connection offers data security stronger than traditional Wi-Fi or legacy wired communication protocols. And because of a compact footprint that's 25 percent smaller than traditional four pair Ethernet, deploying SPE in retrofit environments is simple and fast.

This does not mean single pair versus four pair Ethernet requires an "either/or" decision. The two wiring options are not mutually exclusive and, in many cases, will coexist in support of multiple applications.

● Legacy 4 mA to 20 mA/DO/0 V to10 V ● 100 Mb/Gb Industrial Ethernet
● Standard Ethernet ● 10BASE-T1L Industrial Ethernet

For more information on SPE cables please ask our sales team.

The IEEE 802.3cg standard offers three implementations:

10BASE-T1S:
Built for short distance point-to-point communications (up to at least 25m) and mirrors many fieldbus protocols by providing option of multidrop Ethernet architecture.

10BASE-T1L:
supports a 1000 m reach ($\approx$3281 ft).

10BASE-T1S (Multi-Drop):
supports up to eight nodes.

IEEE 802.3cg	10BASE-T1S (Multi-Drop)	Eight nodes, 25 metres
IEEE 802.3bw	100BASE-T	40 metres
IEE 802.3bu	Power over Data Line (PoDL) PoE for SPE	0.5-52 watts *(multiple classes)*

Transmission Properties

The transmission properties are divided into three categories:

- Category A from 0.1 to 20 MHz
- Category B from 0.1 to 600 MHz
- Category C from 0.1 to 1250 MHz

Category A supports the Base-T1 application from IEEE 802.3cg, Category B the 100/1000 BASE-T1 application from IEEE 802.3bw/bp and Category C the MultiGig 2.5G BASE-T1 application according to IEEE 802.3ch.

Category according to IEC 63171	Application	IEEE standard
A (20 MHz)	10BASE-T1S 10BASE-T1L	802.3cg
B (600 MHz)	10BASE-T1 1000BASE-T1	802.3bw / 802.3bp
C (1250 MHz)	2.5GBASE-T1	802.3ch

Powering of SPE Systems (PoDL)

Single-pair can carry power with the IEEE approved 802.3bu-2016—Standard for Physical Layer and Management Parameters for Power over Data Lines (PoDL) of Single Balanced Twisted-Pair ethernet. The standard supports 100BASE-T1 and 1000BASE-T1, whilst the latest single-balanced twisted-pair ethernet solution to use balanced twisted-pair cabling. 802.3bu-2016 defines a power delivery protocol that supports multiple classes of power delivery across a range of voltages. The standard includes assured fault protection and detection capabilities for identifying powered device signatures, as well as communicating directly with powered devices to determine accurate and safe power delivery.

There are 16 different performance classes for the devices, ranging from 0.5 W to 52 W, which can also differ in the supplied voltage. Classes 0 to 9 were originally designed for 100BASE-T1 and 1000BASE-T1 data links in the automotive sector, while classes 10 to 15 were introduced into the Ethernet standard in the course of the 10BASE-T1 extensions.

Class	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
V max (V)	18	18	18	18	36	36	36	36	60	60	30	30	30	58	58	58
V min (V)	4.94	4.41	12	10.06	10.3	8.86	23.3	21.7	40.8	36.7	14	14	14	35	35	35
I max (mA)	101	227	249	471	97	339	215	461	735	1360	92	240	632	231	600	1579
P max (W)	0.5	1	3	5	1	3	5	10	30	50	1.23	3.2	8.4	7.7	20	52
R_Loop (Ω)	6	6	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	65	25	9.5	65	25	9.5

Table based on information from IEEE Std. 802.3bu and IEEE Std. 802.3cg

Inside this section...

Cable Constructions

Copper cables used for structured cabling have 4 twisted pairs of wires but there are a number of different types of construction:

The ISO/IEC 11801 standard defines the different types of cable screen constructions as *X/YTP*, where *X* is the type of overall screen, *Y* is the type of screen around the twisted pairs and *TP* stands for *Twisted Pair*.

Some examples of typical cable constructions can be seen in the diagram below.

X can be:
- U for Unscreened
- F for Foil Screened
- S for Braid Screen

Y can be:
- U for Unscreened
- F for Foil Screened

Categories & Classes

Component		Link/Channel		Frequency	Application
TIA	ISO/EN	TIA	ISO/EN		
Cat5e	Cat5e	Cat5e	Class D	100 MHz	1G Base-T
Cat6	Cat6	Cat6	Class E	250 MHz	1G Base-T
Cat6a	Cat6$_A$	Cat6a	Class E$_A$	500 MHz	10G Base-T
	Cat7		Class F	600 MHz	10G Base-T
	Cat7$_A$		Class F$_A$	1000 MHz	10G Base-T
	Cat8		Class F$_A$	2000 MHz	up to 40G Base-T

Cat5e: This cable is defined in TIA/EIA-568 and has a slightly higher frequency specification than Cat5 and can be used for 100Base-T and 1000Base-t (Gigabit Ethernet).

Cat6: This cable is defined in TIA/EIA-568-B and provides a significant improvement in performance over Cat5 and Cat5e. During manufacture Cat6 cables are more tightly wound than either Cat5 or Cat5e and can support speeds up to 10Gbps.

The Cat6 Ethernet cables generally have 2+ twists per cm and some may include a nylon spline to reduce crosstalk, although this is not actually required by the standard.

Cat6a: The "a" in Cat6a stands for "Augmented". The Cat6a cables are able to support twice the maximum bandwidth, and are capable of maintaining higher transmission speeds over longer network cable lengths. Cat6a cables utilise shielded to eliminate crosstalk for today's network applications and higher speed protocols such as 10GBASE-T.

Cat7: This is defined by ISO/IEC 11801 Class F cabling. It comprises four individually shielded pairs inside an overall shield. It is aimed at applications where transmission of frequencies up to 600 Mbps is required.

Cat8: These cables are designed for use in High performance 25/40 GBASE-T Ethernet Networking applications up to a maximum length of 30M.

Twisted Pair Certification Methods

Permanent Link Certification

The permanent link test is used to certify the permanent cabling infrastructure and is typically conducted during the installation phase of the network.

Horizontal cross connect · Optional consolidation point · Telecommunications outlet

Permanent link adapter · Horizontal cabling · Consolidation point cable · Permanent link adapter

Begin measurement · End measurement

≤ 90 m (295 ft) (TIA Category 5e, 6, 6A, ISO Class D, E, E$_A$, F$_A$)

≤ 24 m (79 ft) (TIA Category 8, ISO Class I, II*)

ANSI/TIA-568.2-D and ISO/IEC 11801-1

Channel Certification

The channel test involves everything in the permanent link test, plus the patch cords in the work area, and those used for interconnection and/or cross connection. Channel tests are commonly performed after initial installation when the patch cords are available.

Horizontal cross connect · Horizontal cross connect · Optional consolidation point · Telecommunications outlet

Equipment/user cable · Cross connect · Horizontal cabling · Consolidation point cable · Equipment/user cable

Channel adapter · Begin measurement · End measurement · Channel adapter

≤ 100 m (328 ft) (TIA Category 5e, 6, 6A, ISO Class D, E, E$_A$, F$_A$)

≤ 30 m (98 ft) (TIA Category 8, ISO Class I, II*)

ANSI/TIA-568.2-D and ISO/IEC 11801-1

Modular Plug Terminated Link Certification

The modular plug terminated link has an interconnect (modular jack) on one end and a modular plug on the other, and is tested on one end with a permanent link adapter and the other with a patch cord adapter. The MPTL is used in applications where a patch cord is unnecessary or inconvenient such as LED lighting, security, and wireless access points.

Interconnect · Optional consolidation point

Permanent link adapter · Horizontal cabling · Horizontal cabling · Patch cord adapter

Begin measurement · Modular plug termination

End measurement
NOTE: Mated NEXT of plug and test head included in measurement. Centered test head required for testing.

≤ 90 m (295 ft) (TIA Category 5e, 6, 6A)

ANSI-TIA-568.2-D

Cross connects and consolidation points are not allowed for Cat8 or Class I/II

Ethernet Cabling Guidelines

	TWISTED PAIR	Multimode Fibre OM3	Multimode Fibre OM4	Singlemode Fibre OS2 1310mm	Singlemode Fibre OS2 1550mm
10BASE-T (10Mb/s)	✓	2000m	2000m	N/S	N/S
100BASE-T (100Mb/s)	✓	2000m	2000m	N/S	N/S
1000BASE-T (GbE)	✓	550m	1000m	5000m	N/S
10GBASE-T (10GbE)	✓	300m	550m	10000m	40000m
40GBASE-T (40GbE)	✓	100m	100m	10000m	40000m
100GBASE-T (100GbE)		100m	150m	10000m	40000m

N/S = Not Specified

Maximum Copper Cabling Lengths

The TIA 568-C standard defines the maximum length of the Permanent Link to be 90m and the maximum length of the Channel to be 100m, typically made up of 90m of solid conductor cable and 10m of stranded conductor cable.

Switch Link · Patch Cord · CP Cord · Patch Cord

PP · PP · CP · WAO

Permanent Link

Channel

COPPER NETWORKING | TECH TERMS

Wi-Fi & PoE

The latest design standard for Wired and Wireless building combine conventional cabling requirements with the demands of the latest Wi-Fi standards and ever-increasing use of PoE equipment, requires an intelligent approach to cabling in order to derive full benefits.

With the implementation of a Wi-Fi 6 network these technological changes must be understood with the implications for the wired cabling uplink infrastructure. The potential of Wi-Fi 6 can only be fully unlocked if the wired infrastructure is properly specified, designed, and deployed.

Wi-Fi 6 &6E (802.11ax) differ from previous generations of wireless technology as It will deliver four times faster average throughput, with data rates in excess of 5 Gb/s expected. It will benefit from the provision of two wired high bandwidth IT cabling uplink connections that will enhance PoE remote powering.

Wi-Fi 7 (802.11 be) is currently in draft status, with final approval expected in early 2024.

For the uninitiated, the IEEE is already actively working on the development of a new standard IEEE P802.11be™ "Enhancements for Extremely High Throughput (EHT) Wireless LAN" otherwise known as Wi-Fi 7. With an associated theoretical (46.1 Gb/s upstream and downstream combined) and "real world" (> 20 Gb/s upstream and downstream combined) maximum throughput, all while maintaining backwards compatibility with 11a/b/g/n/a/a Wi-Fi networks.

What will be the technical advantages of Wi-Fi 7?

What does Wi-Fi 7 mean for the cabling infrastructure?

While IEEE P802.11be is not projected to be released until 2024, vendors are starting to release Wi-Fi 7 devices, a trend that the market has also seen ahead of other Wi-Fi releases for 5, 6 and 6E. With preliminary throughput of > 18 Gb/s, these devices will incorporate 2 x 10GBASE-T ports using link aggregation to support network uplinks.

Once Wi-Fi 7 AP shipments become material, we're going to see a surge in LAN speeds. The uplink ports on the high-end Wi-Fi 7 products are 10 times the speed of those on most of the APs shipped today. This will mean switch upgrades and new cabling for many enterprises.

As with Wi-Fi 6 and 6e with these higher speeds, multiple telecommunications standards, recommend deploying two category 6A or higher cabling runs to each Wireless Access Point (WAP). Only class EA/ category 6A and higher rated network cabling provides guaranteed support of 10GBASE-T over all installation environments and channel topologies up to 100 meters. Additionally, the use of 6A shielded cables provide the optimal approach when looking to support remote power delivery used to power these next generation Wi-Fi devices.

Wi-Fi Standards

- 802.11be (Wi-Fi 7)
- 802.11ax (Wi-Fi 6 and Wi-Fi 6E separately)
- 802.11ac (Wi-Fi 5, Wave 1 and Wave 2 separately)
- 802.11n (Wi-Fi 4)
- 802.11a/g
- 802.11g
- 802.11b

Understanding Wi-Fi 6, 6E & 7

To understand how Wi-Fi works you can use the motorway example. A 4 line motorway should result in less congestion, greater speeds. Wi-Fi 6E enables devices to use the new spectrum released increasing the number of lanes available.

Wi-Fi 7 will go even further, not only allowing for more and wider lanes, but also adding the ability to use more than one lane at a time and boosting the capacity and speed.

Today's Wi-Fi networks (excluding those with Wi-Fi 6E capabilities) use two frequency bands: 2.4 GHz and 5 GHz. There are several differences between these two bands, but essentially, in the 2.4 GHz band, data travels farther at lower speeds, while the 5 GHz band provides faster speeds in a shorter range. Dual-band enabled Wi-Fi devices allow users to connect to the band best suited for a particular application or device. This worked well, until these bands became overwhelmed with traffic.

This is where 6 GHz enters. Wi-Fi 6E will enable devices to use the new spectrum released by the FCC, thus increasing the number of lanes. Wi-Fi 7 will go even further, not only allowing for more and wider lanes, but also adding the ability to use more than one lane at a time boosting the capacity and speed of the network.

Wi-Fi 7 is not merely an incremental improvement to existing connectivity infrastructure; instead, Wi-Fi 7 creates an entirely different framework to enable future technological developments for a vastly different experience than what we are used to today.

- **Wi-Fi 6 wireless access points (WAPs) need two class EA/category 6A or higher connections.** The ability of Wi-Fi 6 to support greater than 5 Gb/s data speeds for uplink connections. Standards organisations and design experts are recommending deploying two minimum category 6A) to each wireless access point (WAP). Wi-Fi 6 WAPs will need at least one class EA/category 6A connection to support either 2.5GBASE T or 5GBASE-T., 2.5 Gb/s or 5 Gb/s transmission speeds, and to take full advantage of Wi-Fi 6 technology as it matures to support greater than 5 Gb/s, two connections will be required to support link aggregation.

- **Wi-Fi 6 requires a minimum of 25 Gb/s capable backbone.** Installing a 25 Gb/s capable multimode optical fibre backbone will be required to support Wi-Fi 6 uplink capacity. In fact, this is already a key recommendation for Wi-Fi implementations per industry cabling standards.

- **Wi-Fi 6 WAPs will need more power and thermally stable cabling systems.** Wi-Fi 6 radio chips use significantly more complex signal processing and will require 30-watt Type 2 PoE power over Ethernet (PoE). Since the higher power can cause heat build-up in cable bundles, Wi-Fi 6 WAPs are better supported by thermally stable shielded cabling systems and solid conductor cords used in Category 6A shielded cabling.

Fundamentals of PoE

By running data and power over the same cable, PoE reduces the need for additional wiring, saving on costs and redundant cabling. Today, PoE allows for centralization of building control including power and the Internet of Things.

PoE Basics

With PoE, electrical current goes into the data cable at the power supply end (PSE – power sourcing equipment – switch) and then comes out at the device end (PD – powered device). This current is obviously separate from the data signal – neither interferes with the other. PSE feeds power into the cable, either through a switch, also called an end span, or through a midspan, if it resides anywhere other than at the end of the cable. On the other side, PDs (powered devices) will consume power.

Network cables such as Cat5e, Cat6, Cat6a etc comprise eight wires arranged as 4 twisted pairs. With 10 and 100Base-T Ethernet, 2 of these pairs are used for sending information, and these are known as the data pairs. The other 2 pairs are unused and are referred to as the spare pairs (Gigabit Ethernet uses all four pairs). Because electrical currents flow in a loop, two conductors are required to deliver power over a cable. PoE treats each pair as a single conductor and can use either the 2 data pairs or the 2 spare pairs to carry electrical current. It can also use the 4 pairs simultaneously.

Power over Ethernet is injected into the cable at a voltage between 44 and 57 volts DC - typically 48 volts. This voltage allows efficient power transfer along the cable, while still being low enough to be regarded as safe for users. However, it could still potentially damage equipment that has not been designed to receive PoE. Therefore, before a PoE switch or midspan can enable power to PoE equipment, it must perform a signature detection process.

Signature detection uses a lower voltage to detect a characteristic signature of IEEE-compatible PDs (a 25kOhm resistance). Before ports turn on PoE devices, the PSE and PD are required to complete a "handshake procedure" (detection, classification, and inrush) to ensure a valid PD is connected.

The PSE starts this procedure by sending a detection current signal and calculates the detection resistance based on measured voltage. The detection resistance is considered valid if it falls in the range of 23.75kΩ to 26.25kΩ.

After successful detection, the PSE starts classification by sending a voltage signal and at the same time, the PD removes the detection resistor on the port and presents the class resistor. If the PD determines the classification signal is valid, the PD will turn on the internal LDO which applies 2.5V across the class resistor. The PSE measures the current going through the class resistor and recognizes the class level of the PD.

Finally, after a valid classification result (meaning there is no overcurrent or class mismatch), the PSE will turn on the port and start monitoring inrush current. At the same time, the PD takes control to limit the inrush current.

Even after power is supplied, the PSE continues to monitor the current. If the power becomes excessive, if there is a short circuit, or if a PD is unplugged, it will shut off power.

This means there is no issue with connecting non-compliant devices such as printers, fax machines or PCs - because these devices do not carry the IEEE 802.3af signature, the ports will automatically disable power. However, if you are using integrated PoE on a 24-port networking blade, and many of the ports are supporting non-powered devices, it might be more prudent to use a Midspan, and only connect powered ports to the devices that need it. This will lower the overall cost of installation.

PoE Standards Overview

Both IEEE 802.3af as well as 802.3at delivered power over two of the four twisted pairs of the Ethernet cable. The latter was backward compatible with the 802.3af.

Subsequently, a couple of non-standard solutions have been developed. HD Base-T Alliance introduced Power over HD Base-T ("PoH") in 2010. This delivers video, audio, control, 1000Mbps Ethernet and power up to HD Base-T 4K.

The various PoE system classes range from 1 to 8. Type 1 and 2 (IEEE 803.2af and IEEE 803.2at) include Class 1 through Class 4. Type 3 (IEEE 802.3bt) includes Class 5 up to 40W and Class 6 up to 51W at the PD. Type 4 (also IEEE 802.3bt) includes Class 7 up to 62W and Class 8 up to 73W at the PD. Note there are different power levels at the PSE and the PD. Some power loss is budgeted for as a result of heat dissipation

The International Organization for Standardization (ISO) and Telecommunications Industry Association (TIA) are working toward updating Standards to support 4-pair PoE in agreement with IEEE 802.3bt, with their respective Technical Services Bulletin, TSB-184-A and ISO's Technical Report – ISO/IEC TR 29125. These provide cabling guidelines for transmission of 802.3bt PoE over 4-pairs along with other applications.

These International Standards provide information on installation conditions, guidelines on cable bundle sizes for different classification of 4-pair Ethernet cables and maximum power permissible on the cables. They also describe methods to help.

PoE Myths and Misconceptions

PoE has compatibility issues...
In the early days of PoE, many home-brewed and proprietary schemes were employed to get power over network cables. However, as PoE's popularity has spread the IEEE 803.3af Standard has gained universal adoption, meaning compatibility between all modern PoE equipment is assured.

PoE requires electrical knowledge...
IEEE 802.3af PoE is designed to ensure reliable operation in any configuration that would be possible with regular Ethernet. All the user has to do is wire up the network as normal and the equipment will take care of power delivery.

PoE requires special wiring...
Not at all, the same cabling – Cat5e, Cat6 and Cat6a etc – and "RJ45" style connectors are used for both regular and PoE-enabled local area networks.

PoE is forced into devices...
This misconception is surprisingly common, however, as per the "handshake" procedure described above, the PSE will only supply the amount of power required by the PD. If the PD stops working for any reason, the PSE will switch off the power. It is important to remember that power ratings quoted by manufacturers are upper limits.

PoE Types and Classes

PoE Type	Type 1	Type 2	Type 3	Type 4	PoH
PoE Classes	Class 1-3	Class 4	Class 5 & 6	Class 7 & 8	-
Standards	IEEE 803.2af	IEEE 803.2at	IEEE 802.3bt		Based on IEEE 803.2at
Max Power at Device	15.4W (Class 3)	30W	60W (Class 6)	90W (Class 8)	100W
Max Current	350mA	600mA	600mA	960mA	1000mA
Applications Include	Thin Client 802.11n Wireless Biometric Access	VoIP Phones Alarm Systems PTZ Cameras	Nurse Call PoS Readers Access Controls	High Power WiFi Desktop Computers	High Quality AV for streaming, conferences etc

Power over Ethernet Market Overview

Power over Ethernet Market is forecast to grow **12.6%** during 2021-2026. PoE is a technology which describes several standard ad-hoc systems that are used for power and data transmission over an existing data connection with a single Ethernet cabling. Low cost, low maintenance, easy installation and less downtime are some of the factors make it more advanced than traditional network power cables. The rising energy cost and adoption of PoE midspans in commercial and industrial sectors for injecting power without affecting the data are expected to surge the overall Power over Ethernet market demand during the forecast period.

POE injector or midspans enables to carry both data and electricity, thus the Internet-based devices as VoIP phones can work by connecting to just one cable instead for two. The growth of this market is being propelled by the growing demand for PoE-based products such as VoIP phones, IP Cameras, Wireless access points and others. The benefits of VoIP phones such as low cost of communication, ease of installation, and maintenance, among others, have led to the increase in deployment of VoIP phones which will further boost the Power over Ethernet Market during the given forecast period 2021-2026.

Power over Ethernet Market By Standard

802.3Bt Standard holds the major share in Power over Ethernet market at 42% in 2020. Growing demand for high powered devices in order to support smart devices connected to the Ethernet network set to drive the PoE market growth. In 2018, The Institute of Electrical and Electronics Engineers (IEEE) had ratified as in order to meet the power demand of smart buildings and IoT applications. Integration of smart devices has become cost effective with the PoE compared to traditional wiring.

This standard increases the maximum PoE, and enable multiple and high power management capability. It also enables PoE injectors in order to carry out power and data transmission using large bandwidth to wired and wireless devices such as PTZ security cameras, exterior-mounted IP cameras, and next-generation wireless access points (WAPs), interactive and self-service kiosks and others. This increases the demand for 802.3Bt Standard, thereby driving the PoE market.

Power over Ethernet Market By Application

LED Lighting has been the primary application for Power over Ethernet market and is expected to grow at a CAGR of 13.1% during forecast period 2021-2026. In LED Lighting, PoE can be used to eliminate separate power supplies and additional AC electrical infrastructure to power IP enabled building systems. With growing adoption of IoT technology in industries, there has been wide adoption of LED lighting owing to its high efficiency.

PoE is highly used in simplified deployment of LED lighting as it doesn't require a home gateway, unlike Zigbee Z-Wave home automation standard, making them ideal for home and industrial automation. Many companies have been introducing PoE solutions for LED lighting applications as it can be easily operated through mobile using internet. For instance, in 2019, Philips Lighting had installed its first-ever Power over Ethernet connected lighting system. This boosts the demand for PoE in LED lighting application, thereby creating opportunities for the market.

Power over Ethernet Market Drivers

Adoption of advanced technologies such as Internet of Things (IoT) and Smart buildings

With the implementation of IoT technology, there has been increasing adoption of power over Ethernet systems in various industries which set to drive the market growth. Growing number of connected devices that generate more power, light, and data converged networks in IoT-enabled infrastructure have been escalating the demand for PoE solutions. Additionally, PoE assists in eliminating the need for electric points for the smart sensors that can be integrated on the network at any location. With the help of PoE, smart buildings can utilize a single cable without the need of human touch for powering and communicating with the access points, VoIP networks, IP surveillance cameras, smart lighting luminaries, feature rich video IP phones, other smart devices, and sensors. High adoption of PoE solutions in industries as they are used for high efficiency applications and helps in reducing system cost, thereby driving the market.

The Different Options for Using the 4 Pairs

A first option is to use two pairs to power the PD and use the 4 pairs to convey the data.

A second option is to use the 4 pairs to both feed the PD and convey the data.

Understanding CPR Cable Classes & Certification

In 2011, the CPD became the Construction Product Regulation (CPR), EU/305/2011 and became applicable from 1st July 2013 for all construction products except cables. As an EU Regulation, the CPR is directly applicable in all countries of the EU without further transposition. The classification of the reaction to fire performance of all construction products (including cables)was published in 2016 under 2016/364/EU and the mandatory date to establish CE marking forcables are 1st July 2017.

There are seven Euroclasses: Aca, B1ca, B2ca, Cca, Dca, Eca and Fca, with Aca having the highest performance and Fca having the lowest. These Euroclasses reference several fire test standards, specifically, EN 50399, EN 60332 1 2 and EN ISO 1716. Euroclass Eca cables meet the minimum requirement of EN 60332-1-2. EuroClass Fca is applicable to outdoor cables.

Since the CPR only applies to cables **permanently installed** in buildings, patch cords and work area cords, in general, are excluded from the regulation. In addition, each EU member country can adopt whichever Euroclass the country deems suitable. As a result, different EU countries may require cables with different Euroclassification for use in the same installation environment. For example, some countries may require Euroclass B2ca cables to be installed in hospitals whereas other countries may accept Euroclass Cca cables. Prior to the introduction of the CPR, the main fire performance requirements for LSZH communications cables

The CPR & UK Standards

The Construction Products Regulation (CPR) lays down harmonised rules for the marketing on construction products in the EU and despite Brexit is still UK law.

The CPR definition of **"construction product"** is *"any product or kit which is produced and placed on the market for incorporation in a permanent manner in construction works or parts thereof and the performance of which has an effect on the performance of the construction works with respect to the basic requirements for construction works."*

The term **"permanent manner"** is important here when referring to fibre cabling as clearly some fibre cables could be seen as temporary and not part of the buildings permanent structure. For example, fibre patch cords connecting ports in a data rack. These would be seen as non-permanent in the same way a desk or chair would be seen as non-permanent.

Similarly, a cable that is embedded within a wall to provide connectivity between two areas of a building would likely be described as permanent as it has become part of the building's infrastructure in the same way as electrical sockets and cables are.

Clear definition of "Permanent Manner" is defined by each standards body within each nation state. British Standards provide the definitions for product used within the UK.

As Applied in the UK

The Electricity at Work (EaW) Regulations 1989 and British Standards

The EaW Regulations 1989 (Health and Safety Executive – UK Government) is the legislation that sets out the legal obligations for this area.

The British Standards Institute (BSi) creates a "code of practice" under numerous BSi standards that is widely recognised and accepted in the UK and compliance with it is likely to achieve compliance with relevant aspects of the Electricity at Work Regulations 1989. However, BSi standards only provide assistance and ultimately compliance with the EaW Regulations is required.

CPR and BSi Standards in Relation to Fibre Cabling

At the time of writing, edition BS 7601:2016+A1:2017 (Telecommunications equipment and telecommunications cabling – Specification for installation, operation and maintenance) helps to understand which cables could be classified as being used in a "Permanent Manner".

Please note the BS 7601 cannot be used in isolation as it also refers to a number of other British Standards such as BS EN 50174-1:2009+A2:2014, BS EN 50174-2:2009+A2:2014 and the BS EN 50173 series to name but a few.

BS 7601 doesn't explicitly define "permanent manner" but uses the term Installation Cables.

BS 7601 defines Installation Cables as "cables intended for installation into pathways which are hidden (below floors, above ceilings, behind walls) or to which access is limited and which can either be terminated in-situ or "pre-terminated".

For Fire Performance, BS 7601 states that: For new installations and the refurbishment or extension of existing installations, cables installed in the spaces bounded by the external fire barriers of buildings and other structures shall meet the following requirements:

a) Installation cables shall, as a minimum, meet the requirements of EuroClass Cca-s1b,d2,a2, in accordance with BS EN 13501-6; and

b) All other telecommunications cables shall, as a minimum, either

1) meet the requirements of EuroClass Eca, in accordance with BS EN 13501-6; or
2) meet the recommended requirements of BS EN 60332-1-2

BS 7601 uses the term "cables intended for installation". Therefore, logical conclusions would be that: -

i) Any type of fibre cable (pre-terminated or un-terminated) that is intended to be installed in "pathways which are hidden (below floors, above ceilings, behind walls) or to which access is limited" will be classed under CPR as a product that is "for incorporation in a permanent manner" and hence be within the scope of CPR. These products would then need to be managed to the requirements of CPR which include having a EuroClass Cca-s1b,d2,a2, in accordance with BS EN 13501-6.

ii) Other cables are outside the scope of CPR.

iii) The Intended Use of a product determines whether it is within the Scope of CPR

iv) **Neither CPR or BS 76011 determines what product you can use**

v) CPR ensures that products are marketed in a harmonised way. It does this by ensuring that products are tested, audited and presented in a consistent manner.

vi) CPR does not specify what EuroClass a product needs to be for a particular use.

vii) Equally, BS 7601 is a standard which recommends an approach to the Specification for installation, operation and maintenance for cabling and is not a legal requirement.

viii) With regards to cables and their reaction to fire (EuroClass), The Building Regulations: Part B Fire Safety: Parts 1 and 2 determine what products can be used where. BS 7674:2017 and BS 9999:2017 are used to ensure adherence to this regulation and BS7601 forms part of them.

ix) So even though BS 7601 may recommend using a Cca-s1b,d2,a2 rated cable in a particular instance, it is possible to use a lower rated cable or unrated (such as LSZH) cable or conversely a higher rated cable may be required so there compliance to BS 7974 and BS 9999.

What are the Performance Classes?

Class	F_{ca}	E_{ca}	D_{ca}	C_{ca}	$B2_{ca}$	$B1_{ca}$	A_{ca}
	FLAMMABLE	BASIC PERFORMANCE					HIGHER PERFORMANCE
	Products where a small flame attack is not causing large flame spread.	Products that show a fire performance approximately like wood. Products show a continuous flame spread, a moderate fire growth rate, and a moderate heat release rate.	Products that do not give a continuous flame spread, show a limited fire growth rate and show a limited heat release rate.	Products that are combustible but show very little burning.	Products that are combustible but show very little burning.	Level of highest performance corresponding to products that practically cannot burn.

Structure of Performance Classes

Class declare one of the following values with decreasing performances: A_{ca}, $B1_{ca}$, $B2_{ca}$, C_{ca}, D_{ca}, E_{ca} to F_{ca}

Flaming Droplets declare one of the following values with decreasing performances: d0, d1 and d2
Only for classes $B1_{ca}$ to D_{ca}

$$B2_{ca} - s1a, d0, a1$$

dash

comma

Smoke opacity declare one of the following values with decreasing performances: s1a, s1b, s1, s2, s3
Only for classes $B1_{ca}$ to D_{ca}

Acidity declare one of the following values with decreasing performances: a1, a2 and a3
Only for classes $B1_{ca}$ to D_{ca}

CLASS	ADDITIONAL PERFORMANCES			AVCP	NOTIFIED BODY
	SMOKE	DROPLETS	ACIDITY		
A_{ca}				1+	YES
$B1_{ca}$ -	s1a, s1b, s1, s2, s3 ,	d0-d2 ,	a1-a3	1+	YES
$B2_{ca}$ -	s1a, s1b, s1, s2, s3 ,	d0-d2 ,	a1-a3	1+	YES
$C1_{ca}$ -	s1a, s1b, s1, s2, s3 ,	d0-d2 ,	a1-a3	1+	YES
D_{ca} -	s1a, s1b, s1, s2, s3 ,	d0-d2 ,	a1-a3	3	YES
E_{ca}				3	YES
F_{ca}				4	NO

CPR Guidelines

EUROCLASS	Reaction to Fire	Smoke Production (S)	Flaming Droplets (D)	Acidity (A)
Aca	Gross heat of combustion BS EN ISO 1716			
B1ca	Flame Spread BS EN 50399	S1, s2 and s3	Optional additional during the fire test to monitor flaming droplets	Optional separate test to measure the acidity of gasses given off. Measured as pH and conductivity
B2ca	BS EN 60332-1-2 Heat release.	Mandatory test for smoke production monitored during s1, s2 and s3	d0 d1 d2	a1 a2 a3
Cca	BS EN 50399	BS EN 61034-2	BS EN 50399	BS EN 60754-2
Dca	Heat release BS EN 50399 Flame Spread BS EN 60332-1-2			
Eca	Flame Spread BS EN 60332-1-2	Basic test by independent authorised laboratory (notified body)		
Fca	Factory or laboratory test (not necessarily notified body) but does not meet the requirements of class Eca			

Classes A to E have to be tested by an independent authorised laboratory. With F, E & D classes this is a one-off certification. For C Class & above these must be regularly tested and subject to the AVCP system which controls the consistency of assessment results.

Introducing the NEW Range of PoE++ Compliant Network Patch Leads

PΦE++

Which Category Cable is Best?

'Which Category cable do I need?' is a question we often get asked, and it can definitely be a tricky area to navigate for some people.

The simple answer is that there is no simple answer to this. Ultimately, the best cable largely depends on what application it will be used for, where it will be installed, and what screening options will be needed.

Ultimately, the most important factor to consider is whether the cable you select is going to be capable of the performance needed. This handy guide is designed to simplify the selection process for you:

	Cat5e	Cat6	Cat6a	Cat7/7a
Max Frequency	100MHz	250MHz	500MHz	600/1000MHz
Speed	1000Base-T (1 Gigabit)	1000Base-T (1 Gigabit), 10G-Base-T (10 Gigabit) is possible but limited to 55m	10G-Base-T (10 Gigabit)	10G-Base-T (10 Gigabit), 40G-Base-T (40 Gigabit) is possible but limited to 50m
Screening	Unscreened or collectively screened	Unscreened or collectively screened	Unscreened, or a combination of individual pair and collective screening	Individual pair/collectively screened only
Channel	Class D	Class E	Class EA	Class F/FA
CPR Classification	Fca to B2ca	Class Fca to B2ca	Class Fca to B2ca	Class Fca to B2ca
Applications	Data, PoE, telephone & video signals	Can be used for PoE, enterprise, HD video, home and business data networks	In addition to PoE, enterprise, home and business data networks, Cat6A can also be used within building automation, 4K video distribution, CCTV, and access control systems	Can be used within data centre and server room environments where additional speeds are required

Whilst performance levels need to be met, you don't want to over specify either, unless the need to futureproof is evident from the outset. Why use cables that give data centre level performance when your installation is in fact designed to provide telephone and video signals in a domestic setting?

Fire performance is also critical to all internal cable installations. If BS6701/7671 is being used within an installation it is worth taking into consideration the CPR classification required.

Understanding Fire Stopping

Fire stopping is a vital component for successful passive fire protection strategies

By helping to contain the spread of flames and smoke, investing time and resources into fire stopping can make the difference between regulatory compliance and subpar levels of protection.

Fire-protection regulations have undergone numerous changes as a result of the inquiries in the wake of the Grenfell disaster. Regulatory requirements can vary significantly based on a building's size, intended usage and a host of other factors. Industry professionals should therefore refamiliarise themselves with these regulations.

It is important to remember that if you are involved with the provision of fire protection at any level, then you share liability for its usefulness and operation in the event of a fire.

This CPD provides insight into how you can fulfil your legal responsibilities.

Objectives
- Understand your legal liability in respect to the provision of fire protection.
- Gain knowledge of how fire behaves and how to be confident in a product's combustibility.
- Learn the importance of designing and installing to achieve effective compartmentation.

Let's start with legislation

There has been a long history of legislation regarding building fire safety in the UK, and there are a number of regulations requiring us to fire stop.

Focusing on new buildings, the primary pieces of legislation in England include the Building Act 1984, the Regulatory Reform Fire Safety Order (RRFSO) 2005, the Building Regulations 2010 and the recently introduced Building Safety Act 2022.

The Building Act 1984 sought to consolidate previous legislation concerning the construction process, and the design and specifications for buildings. Amendments have been issued, notably with enhanced fire-safety measures.

Within the Building Regulations 2010 it is stated: "A wall common to two or more buildings shall be designed and constructed so that it adequately resists the spread of fire between those buildings."

It goes on to add: "Where reasonably necessary to inhibit the spread of fire within the building, measures shall be taken, to an extent appropriate to the size and intended use of the building, comprising either or both of the following…
- "A. Sub-division of the building with fire-resisting construction;
- "B. Installation of suitable automatic fire suppression systems."

Following the Grenfell Tower fire in 2017, changes to the Building Regulations banned combustible materials from being used in the external walls of certain categories of building over 18m in height. However, the use of combustible cladding and insulation materals continues to be permitted in the external walls of buildings outside the scope of the ban. In 2019, fire spread rapidly across the facade of The Cube, a student accommodation building in Bolton. As the building was only 17.84m tall, regulations did not prevent combustible materials from being used in its external walls.

Extensions to the ban in 2020, and the introduction of the Building Safety Act in 2022, have changed the landscape further, with rules becoming more stringent and a greater onus falling on construction firms with regard to design and installation and record-keeping.

The Building Safety Act includes the following key elements:
- A more onerous safety regime accompanied by new obligations which must be met throughout a building's lifecycle, including its delivery, design, construction and operational phases.
- The introduction of a new Building Safety Regulator, along with revision of the training and competency standards.
- A framework of measures designed to deal with breaches, including fines and prison sentences.
- Financial levies on developers to fund remediation.
- The period for making claims for safety-related defects has been extended to 30 years for claims arising before 28 June 2022, and to 15 years for claims arising from now on.

The two principal objectives of these initiatives were: to create a robust, stringent safety regime for the construction, operation and maintenance of higher risk buildings; and to ensure the remediation of non-compliant buildings at no cost to leaseholders living in unsafe buildings.

Outside these pieces of legislation, there is further government guidance to help navigate fire-stopping responsibilities, including Approved Document B (ADB) Building Regulations fire safety guidance, the Regulatory Reform Fire Safety Order (RRFSO) guidance notes, Building Bulleting 100: Design for fire safety in schools, and the Heath Technical Memorandum (HTM) 05-02, which provides information on fire safety in the design of healthcare buildings.

Guidance documents can provide information on practical ways to meet the requirements of the building regulations. However, they cannot be relied upon as the sole method for achieving this.

Liability under the Defective Premises Act (DPA) is strict and applies to all dwellings in England and Wales. The main takeaways are:
- The limitation period for claims has increased from six to 30 years for work completed on buildings before 28 June 2022.
- The period for claims on buildings completed from now on has been extended from six to 15 years.
- It is not a valid defence for the defendant to claim to have followed established practice at the time.

Anyone responsible for the defective work is potentially liable, including builders, contractors, architects and designers.

Common service penetrations include pipes and cables running through compartment walls and floors.

Understanding Fire Stopping (continued)

The golden thread

For "higher-risk" buildings in England, the Building Safety Act requires the client to ensure that a "golden thread" of the design, operation and maintenance information needed to keep a building safe is recorded, updated and maintained.

A digital record of all project and asset data, the golden thread will record every decision, giving a clearer accountability trail to reduce risk and improve safety.

It also introduced a three-stage gateway process to improve fire-safety standards, with the requirement for a safety case review at each gateway:

- Gateway one (planning) – requires all fire safety matters to be incorporated into the planning stage.
- Gateway two (building control approval) – requires clients to submit a building control approval application to the Building Safety Regulator before construction can commence.
- Gateway three (completion certificate) – assurance that the building is safe for occupation must be provided for the Building Safety Regulator to issue a completion certificate; including signed declarations from the principal contractor and designer that the works and building comply with the Building Regulations.

Fire knowledge

Understanding fire and how it behaves is essential for any individual involved with the selection, design and installation of fire-stopping and fire-protection measures.

A fire needs three elements in order to ignite: fuel, oxygen and heat energy. Removing any of these three elements will stop a fire.

Fuel is a flammable material that begins the process of combustion. When fuel is heated past its flash point, it enters the gas phase and releases vapour pressure that can ignite in air and support combustion.

Oxygen supports burning due to oxidation. This is when gases released by fuel heat up, break apart and recombine with oxygen, resulting in burning.

Heat energy is produced during combustion due to the reaction being exothermic. Since these reactions are ongoing, combustion releases enough heat to make the fire self-perpetuating.

Euro-class EN 13501-1	Materials
A1	Stone wool, glass wool, cellular glass
A2-s1, d0	Some faced stone or glass wool products
B-s2, d0	Phenolic foam (TYP EU)
C-s2, d0	Phenolic foam (TYP UK), some PIR
D-s1, d0	Some PIR
E-s2, d0	Flame retardant EPS/XPS, PUR
F-s1, d0	EPS, PIR

Product combustibility

Understanding a product's combustibility helps to understand whether a product is going to add fuel to a fire's load. The European Reaction to Fire classification system is the EU common standard for assessing the qualities of building materials in the event of fire. This information is relevant for the UK and for the Republic of Ireland.

The Euroclass system (see table, left) determines a product's fire performance by measuring a comprehensive set of characteristics, including ignitability, flame spread, heat release, smoke production and propensity for producing flaming droplets/particles. The classifications run from A1 to F, with products achieving A1 and A2 classifications considered non-combustible.

Class 0 references do not determine a product's combustibility and have now been removed from Approved Documents.

By law, all building insulation products subject to a harmonised EN standard must be CE marked, meaning manufacturers must declare a fire performance classification for each of their products.

The Euroclass rating of a product can often be missing from its data sheet, but manufacturers are legally bound to report this information in the product's declaration of performance (DoP). Documents should be freely available from the manufacturer's website, but you may have to request a copy.

Fire protection of the structure prevents a building from premature collapse

The importance of compartmentation

A vital part of fire-safety design, compartmentation can make the difference between a fire in a building and a building on fire.

Helping to prevent the spread of fire, smoke and toxic gases by subdividing the building into manageable areas of risk, compartmentation ensures each compartment is reinforced by fire-resistant materials.

Even the smallest hole in any dividing wall could compromise the effectiveness of a building's compartmentation, allowing fire to spread throughout the building.

Fire-rated elements have an integrity and insulation rating under the EI classification. The letters "EI" represent insulation, followed by the duration (in minutes) it provides fire resistance.

The required fire-resistance rating depends on the building type, the application, the area or the use of the building, the occupation levels, and the height of the building.

The key factor in compartmentation is addressing whether you require fire protection or fire stopping. Understanding the difference between the two terms is crucial.

Fire protection

Fire protection is focused on protecting structural elements of the building by integrating fireresistant materials into the fabric of the building.

Protecting the structural elements of the building from high temperatures is key. This will help to maintain the load-bearing structure of the building, reducing the risk of the building collapsing.

Reducing damage also increases the likelihood of the building being able to be reused in future.

There are products that are suitable in providing fire protection to a building's structural elements. Structural steel fire protection can help maintain a building's load-bearing strength in the event of a fire, while concrete protection for concrete soffits adds a layer of protection to concrete floors.

Fire stopping

Fire stopping is used to reinstate a fire-rated compartment following the installation of building services or any gaps which are formed within the walls or floors.

Linear gap seals installed at compartment junctions, and buildings services which penetrate through compartment walls and floors, must demonstrate that they achieve the same integrity and insulation ratings as required by the building compartment.

In addition to preventing the transfer of fire and heat between building compartments, passive fire-protection measures such as linear gap and penetration seals should also inhibit the passage of smoke and toxic gases, which are the main cause of death in a fire.

To summarise, achieving successful compartmentation requires looking at the following factors:

- Protection to the structure of the building, giving occupants time to escape and allowing the fire service to access the building to rescue people, find and fight the fire.
- Inhibiting the passage of smoke and toxic gases.
- Resistance to the spread of fire from the room of origin.

Fire safety from the design stage

For anyone approaching design, the lowest-risk route to take is with standard tested solutions.

Third-party tested materials and third-party accredited installers are assessed independently, which acts as a seal of approval to ensure the installed products will perform as intended.

However, tested standard solutions are not always available. There are two alternative options:

- Speak to the manufacturer to see whether they can provide a tested solution or make a judgment based on their standard test data.
- Have an assessment carried out by a UKAS accredited laboratory or a fire engineer. Accreditation, experience and the necessary qualifications are essential.

When installing fire stopping or fire protection in a building, you should be aware of your role and the level of liability that entails with regard to fire protection. Likewise, knowledge of the firestopping and fire-protection requirements of the specific project is essential.

Change is constantly hitting the construction industry, and it is important that you stay informed and always make safety the key priority.

Cable moves, adds and changes

BSI Flex 8670 v3.0:2021-04
Built environment. Core criteria for building safety in competence frameworks. Code of practice

PAS 8671:2022
Built environment. Framework for competence of individual Principal Designers. Specification

PAS 8672:2022
Built environment. Framework for competence of individual Principal Contractors. Specification

PAS 8673:2022
Built environment. Competence requirements for the management of safety in residential buildings. Specification

Building Safety Act 2022 `UK LAW`
'establish and maintain a committee concerned with the competence of persons in the built environment industry ("industry competence")'

Flex = a fast fast-track standard to support areas of rapid innovation   PAS = (Publicly Available Specification) a fast fast-track standardization document

Standards and regulations

Building Safety Act 2022

Building Regulations – Part B Fire Safety

BS7671:2018 Amendment 2:2022 – Requirements for Electrical Installations

BS 9999 – Code of practice for fire safety in the design, management and use of buildings

BS 8519:2010 – Selection and installation of fire fire-resistant power and control cable systems for life safety and fire-fighting applications. Code of practice

BS EN 61537 – Cable Ladder Systems and Cable Tray Systems for cable management

BS EN 1366-3 – Fire resistance tests for service installations. Penetration seals

BS 8644-1:2022 – Digital management of fire safety information. Design, construction, handover, asset management and emergency response

BSI Flex 8670 v3.0:2021-04 – Built environment. Core criteria for building safety in competence frameworks. Code of practice

PAS 8671:2022 / PAS 8672:2022 / PAS 8673:2022 – Built environment. Competence Frameworks

Summary

- Have a good understanding of the importance and relevance of **fire stopping** cable pathways

- Be able to discuss the factors involved to achieve **successful** fire protection and containment

- Understand the need for future **flexibility** of cable moves, adds and changes

- Recognise the different types of cable pathway **fire stopping** systems

- Have a knowledge of national and international **testing, certification, standards and regulation**

- Be aware of the complexity around **fire safety design**

- **Share solutions** and be able to utilise the checklist

- Understand the causes of **non-conformance** and how to break the cycle

Copper Networking

PART NO	DESCRIPTION

Networking Cable

Cat6a CPR Network Cables

XX6A0001Z	Cat6a Ice Blue U/FTP LSOH 23AWG Solid CPR Dca Cable 305m Reel in Box
XX6A0004	Cat6a Ice Blue U/FTP LSOH 23AWG Solid CPR B2ca Cable 305m Reel in Box
XX6A0005	Cat6a Ice Blue F/FTP LSOH 23AWG Solid CPR Dca Cable 305m Reel in Box
XX6A0009	Cat6a Ice Blue F/FTP LSOH 23AWG Solid CPR B2ca Cable 305m Reel in Box

Cat6a External Grade Cable

XX6A0006	Cat6a Black F/FTP Maxxam XXtreme Outdoor Ethernet 23AWG Solid Cable 305m Reel in Box

Cat6 CPR Network Cables

XX60003	Cat6 Violet U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003B	Cat6 Blue U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003BK	Cat6 Black U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003G	Cat6 Green U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003GY	Cat6 Grey U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003O	Cat6 Orange U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003R	Cat6 Red U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003WH	Cat6 White U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60003Y	Cat6 Yellow U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX60009	Cat6 Grey F/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reel in Box
XX60004	Cat6 Violet U/UTP LSOH 24AWG Solid CPR B2ca Cable 305m Reel in Box
XX60004B	Cat6 Blue U/UTP LSOH 24AWG Solid CPR B2ca Cable 305m Reel in Box
XX60004BK	Cat6 Black U/UTP LSOH 24AWG Solid CPR B2ca Cable 305m Reel in Box
XX60004GY	Cat6 Grey U/UTP LSOH 24AWG Solid CPR B2ca Cable 305m Reel in Box

PART NO	DESCRIPTION
XX60004O	Cat6 Orange U/UTP LSOH 24AWG Solid CPR B2ca Cable 305m Reel in Box
XX60004WH	Cat6 White U/UTP LSOH 24AWG Solid CPR B2ca Cable 305m Reel in Box
XX60004Y	Cat6 Yellow U/UTP LSOH 24AWG Solid CPR B2ca Cable 305m Reel in Box

Cat6 External Grade Cable

XX60006	Cat6 Black F/UTP Maxxam XXtreme Outdoor 23AWG Solid Cable 305m Reel in Box
XX60007	Cat6 Black U/UTP Maxxam XXtreme Dual Jacket 23AWG Solid Cable 500m Reel
XX60008	Cat6 Black U/UTP Maxxam XXtreme Outdoor 23AWG Solid Cable 305m Reel in Box

Cat5e CPR Network Cables

XX5E0001	Cat5e Violet U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001B	Cat5e Blue U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001BK	Cat5e Black U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001G	Cat5e Green U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001O	Cat5e Orange U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001PVC	Cat5e Grey U/UTP PVC 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001R	Cat5e Red U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0009	Cat5e Grey F/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001Y	Cat5e Yellow U/UTP LSOH 24AWG Solid CPR Dca Cable 305m Reelex Box
XX5E0001C	Cat5e Violet U/UTP LSOH 24AWG Solid CPR Cca Cable 305m Reelex Box

Cat5e External Grade Cable

XX5E0005	Cat5e Black F/UTP Maxxam XXtreme Outdoor 24AWG Solid Cable 305m Reel in Box
XX5E0007	Cat5e Black U/UTP Maxxam XXtreme Outdoor 24AWG Solid Cable 500m Reel
XX5E0008	Cat5e Black U/UTP Maxxam XXtreme Outdoor 24AWG Solid Cable 305m Reelex Box

PART NO	DESCRIPTION
Modules	
Cat6a	
72-3759	Cat6a Shielded Keystone Shuttered Jack PoE+
72-3758	Cat6a Shielded Keystone Pack of 24 Keystone Shuttered Jack PoE+
72-3752	Keystone Termination Tool
Cat6	
72-3690	Cat6 UTP Low Profile Module 25mm x 50mm White
72-3690B	Cat6 UTP Low Profile Module 25mm x 50mm White (PK 24)
72-3691	Cat6 UTP Module LJ6C White
72-3692	Cat6 UTP Toolless Keystone Jack Black
72-3694	Cat6 UTP Shuttered Low Profile Flat Module 25mm x 50mm Black
72-3700	Cat6 UTP Angled Module 25mm x 50mm White
72-3693	Cat6 UTP Punch Down Keystone Jack Component Level Black
Cat5e	
72-3653	Cat5e UTP Module 25mm x 50mm White
72-3654	Cat5e UTP Module LJ6C White
72-3658	Cat5e UTP Toolless Keystone Jack Black
72-3655	Cat5e UTP Low Profile Flat 25mm x 50mm Black Shuttered Module

Patch Panels

Cat6a Patch Panels

72-3748	24 Port Cat6a FTP 0.5u PCB Patch Panel
72-3749	24 Port Cat6a FTP 1u PCB Patch Panel
72-3760	24 Port 1u Unloaded Keystone Patch Panel
72-3761	48 Port 1u Unloaded Keystone Patch Panel
72-3762	24 Port 1u Unloaded Keystone (Angled Jacks) Patch Panel
XX6A0055	24 Port 1u Unloaded Keystone Angled Patch Panel

Cat6 Patch Panels

72-3393	24 Port Cat6 UTP 1u EasyPunch Patch Panel
72-3389	48 Port Cat6 UTP 1u Patch Panel
72 -3641	24 Port Cat6 FTP 1u Patch Panel
72-3396	48 Port Cat6 FTP 1u Patch Panel

PART NO	DESCRIPTION
72-3680	24 Port Cat6 UTP 1u Eco Patch Panel
72-3684	48 Port Cat6 UTP 2u Patch Panel
72-3683	24 Port Cat6 UTP 1u Patch Panel
Cat5e Patch Panels	
72-3387	16 Port Cat5e UTP 1u Patch Panel
72-3391	24 Port Cat5e UTP 1u Patch Panel
72-3392	24 Port Cat5e UTP 1u Eco Patch Panel
72-3388	48 Port Cat5e UTP 1u Patch Panel
72-3395	48 Port Cat5e UTP 2u Patch Panel
72-3399	24 Port Cat5e UTP 1u EasyPunch Patch Panel

Looking for Network Patch Leads?
Go to the 'Network Patch Leads' section on page 9
Or 'Fibre Networking' section on page 59

Cable Management

Blanking Panels

PART NO	DESCRIPTION
72-2601	1u 19inch Toolless Blanking Panel Black
72-2602	2u 19inch Toolless Blanking Panel Black
72-2604	4u 19inch Toolless Blanking Panel Black
XXRBLANK10	1u 10inch Blanking Panel Black
72-2667	1u 19inch Blanking Panel Black
72-2666	2u 19inch Blanking Panel Black
72-2665	3u 19inch Blanking Panel Black
72-2664	4u 19inch Blanking Panel Black

Cable Management

PART NO	DESCRIPTION
72-2660	1u Vented Black Panel
72-2668	1u 4 Ring Cable Tidy Panel Black
72-2672	1u 5 Ring Cable Management Bar 65mm Rings Black
72-2674	1u 5 Ring Cable Management Bar 100mm Rings Black
72-2673	2u 4 Ring Cable Management Bar 65mm Rings Black
72-2675	2u 4 Ring Cable Management Bar 100mm Rings Black
72-2676	1u 4 Ring Extra Depth 100mm Cable Tidy Panel Black
72-2678	1u Cable Dump Panel Steel with Pass Through Black
72-2690	1u Cable Dump Panel Plastic with Pass Through Black
72-2691	2u Cable Dump Panel Plastic with Pass Through Black
72-2680	1u Brush Letterbox Cable Tidy Panel Black
72-2681	1u Brush Strip Panel Half Open Top Style Black
72-2682	2u Brush Strip Panel Letterbox Style Black
72-2683	1u Brush Strip Panel 4 Ring Black
72-2685	100mm x 75mm Cable Management Ring Black
72-2686	75mm x 75mm Cable Management Ring Black
72-2688	120mm x 110mm Cable Management Ring Black
72-2694	1u Slotted Finger 19inch 92mm Depth Cable Management Black
72-2695	2u Slotted Finger 19inch 92mm Depth Cable Management Black
72-2697	25mm x 50mm Brush Module
72-2698	50mm x 50mm Brush Module
72-2699	100mm x 50mm Brush Module
52-3108	Cage Nuts & Screws M6 Silver (PK 50)
CAGENUTBK	Black Cage Nuts & Screws M6 (PK 50)

Faceplates & Adaptors

PART NO	DESCRIPTION
72-3370	LJ6C Faceplate Single Gang 1 Port
72-3371	LJ6C Faceplate Single Gang 2 Port
72-3382	Flush Faceplate 86mm x 86mm with Labelling Window Single Gang
72-3380	Bevelled Faceplate 50mm x 50mm Single Gang
72-3381	Bevelled Faceplate 50mm x 100mm Double Gang
72-3377	Single Gang Cat6 Module Loaded Faceplate - 2 x Modules
72-3378	Double Gang Cat6 Module Loaded Faceplate - 4 x Modules
72-3379	Flat Faceplate 50mm x 50mm Single Gang
72-3379B	Flat Faceplate 50mm x 50mm Single Gang (Pack 52)
72-3383	Flat Faceplate 50mm x 100mm Double Gang
XXP1050	Office Style Faceplate 50mm x 50mm Single Gang White
XXP1052	Office Style Faceplate 50mm x 100mm Double Gang White
XXNLC004	Lockable Tamperproof Single Gang Faceplate
72-3652	Quarter Blank 12.5mm x 50mm White (PK 2)
72-3651	Half Blank 25mm x 50mm White
72-3651B	Half Blank 25mm x 50mm White (PK 10)
72-3373	LJ6C Blank 25mm x 38.5mm White
72-3373B	LJ6C Blank 25mm x 38.5mm White (PK 10)
72-3755	Angled Shutter for Keystone Jack 25mm x 50mm
72-3755B	Angled Shutter for Keystone Jack 25mm x 50mm (PK 50)
72-3753	Angled Black Shutter for Keystone Jack 25mm x 50mm
72-3753B	Angled Black Shutter for Keystone Jack 25mm x 50mm (PK 24)
72-3756	LJ6C Angled Shutter For Keystone Jack White
72-3757	LJ6C Angled Shutter For Keystone Jack Black

Complete FacePlate

PART NO	DESCRIPTION
72-3770	Cat6 Single Gang Two Port Faceplate with Two Modules
72-3771	Cat6 Double Gang Quad Port Faceplate with Four Modules

Solid Harness Patch Leads

PART NO	DESCRIPTION
XX6S0130	30m Cat6 RJ45 Grey U/UTP LSOH Solid Harness Patch Lead

*Cat6 Solid Harness Patch Leads also available in additional colours.
Please contact our sales team for more details.*

Copper Networking

PART NO	DESCRIPTION

Cat6a Field Termination Plugs

22-2200	Cat6a RJ45 FTP Field Termination Plug with Black Latch
22-2201	Cat6a RJ45 FTP Field Termination Plug with Blue Latch
22-2202	Cat6a RJ45 FTP Field Termination Plug with White Latch
87-2804	Crimping Tool for Cat6a Field Termination Plug

Other colour latches are available. Please contact our sales team for more details.

Cat6a Universal UTP/STP MPTL Field Termination Plug

72-3770	Cat6a Universal UTP/STP MPTL Field Termination Plug

Couplers

Couplers

72-3409	Cat6a RJ45 FTP Keystone Panel Mount Through Coupler (10G)
22-2139	Cat6a 10G RJ45 FTP Through Coupler
22-2147	Cat6a UTP IDC Punch Down Type Coupler
22-2147B	Cat6a UTP IDC Punch Down Type Coupler (PK 50)
22-2148	Cat6a FTP IDC Punch Down Type Coupler Joint
72-3404	Cat6 RJ45 UTP Keystone Panel Mount Through Coupler
72-3404B	Cat6 RJ45 UTP Keystone Panel Mount Through Coupler (PK 50)
22-2137	Cat6 RJ45 UTP Female - Female Coupler
22-2137B	Cat6 RJ45 UTP Female - Female Coupler (PK 50)
72-3390	Cat5e RJ45 UTP Keystone Panel Mount Through Coupler
22-2126	Cat5e RJ45 UTP Female - Female Coupler
22-2126B	Cat5e RJ45 UTP Female - Female Coupler (PK 50)
22-2136	Cat5e RJ45 FTP Female - Female Coupler
22-2129	Cat5e UTP Junction Box IDC Punch Down
22-2125	Cat5e Y Bridge Adaptor
22-2128	RJ45 UTP Female Coupler 8P8C
22-2630	RJ45 - D9 Male Modular Adaptor Grey
22-2632	RJ45 - D25 Male Modular Adaptor Grey

PART NO	DESCRIPTION
22-2634	RJ45 - D9 Female Modular Adaptor Grey
22-2130	Data/Data 10/100 Economiser (Pairs to Work)
22-2134	Voice/Voice Economiser (PK 2)
22-2138	Data/Voice 10/100 Economiser (Pairs to Work)

Coupler Patch Panels

72-3408	24 Port Cat6a FTP 1u Coupler Panel
72-3405	16 Port Cat6 UTP 1u Coupler Panel
72-3406	24 Port Cat6 UTP 1u Coupler Panel
72-3407	48 Port Cat6 UTP 2u Coupler Panel
72-3384	16 Port Cat5e UTP 1u Coupler Panel
72-3385	24 Port Cat5e UTP 1u Coupler Panel
72-3386	48 Port Cat5e UTP 2u Coupler Panel

Back Boxes

72-2650	Single Gang PVC Back Box 21mm
72-2653	Single Gang PVC Back Box 27mm
72-2655	Single Gang PVC Back Box 32mm
72-2652	Single Gang PVC Back Box 45mm
72-2657	Double Gang PVC Back Box 32mm
72-2651	Double Gang PVC Back Box 45mm
MBB40S	Metal Back Box Single Gang 40mm for 20mm Conduit
UK1-1MG	Metal Faceplate for 1 x LJ6C Fascia

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PART NO	DESCRIPTION

Telecom Cables

22-2860	3m RJ12 6P6C 6 Core Straight Wired White
22-2862	5m RJ11 6P6C 6 Core Straight Wired White
22-2863	3m RJ11 - RJ11 6P4C (All Lines) White
22-2864	5m RJ11 - RJ11 6P4C (All Lines) White
22-2871	10m RJ11-RJ11 6P4C ADSL WHITE Modem Filter
22-2872	15m RJ11-RJ11 6P4C ADSL White Modem Filter
22-2873	20m RJ11-RJ11 6P4C ADSL White Modem Filter
22-2874	30m RJ11-RJ11 6P4C ADSL White Modem Filter

Voice Products & Panels

72-3397	25 Way 1u Voice Panel 3 Pair (1,2-3,6-4,5)
72-3398	50 Way 1u Voice Panel 3 Pair (1,2-3,6-4,5)
72-3413	237A 10 Pair Disconnection Strip Module Cream
72-3414	51A Designation Strip

Telephone Crimp Plugs & Adaptors

22-2145	4 Way BT Crimp Plug BT431A
22-2146	6 Way BT Crimp Plug BT631A
22-2866	15cm BT - RJ45 Tailed Secondary
22-2870	15cm BT - RJ45 Tailed PABX Master
22-2908	RJ11 Female - BT Male Adaptor
22-2909	ADSL Microfilter Adaptor
22-2910	ADSL Microfilter Tailed Adaptor
22-2890	10m RJ11-RJ11 6p4c (All Lines) White
22-2891	15m RJ11-RJ11 6p4c (All Lines) White
22-2892	20m RJ11-RJ11 6p4c (All Lines) White
22-2893	30m RJ11-RJ11 6p4c (All Lines) White

PART NO	DESCRIPTION

Tooling & Testers

87-0438	110 Impact Punch Down Tool
72-2669	Krone Style 2A Punch Down Tool
87-2799	RJ10, RJ11, RJ12, RJ45 Non-Ratchet Crimp Tool
87-2807	BT/RJ11 Rachet Crimp Tool
87-2808	RJ45/RJ11 Ratchet Crimp Tool
87-2809	RJ45/RJ11 Premium Ratchet Crimp Tool
87-2810	RJ45 Crimp Tool for use with 22-2096
87-2811	Universal Cable Stripping Tool Upto 22AWG
87-2812	Cable Stripper for UTP/STP
CYC2	Jacket Stripper 4.0 - 11.0mm Diameter
87-3551	RJ45/RJ11/BNC/USB Continuity Tester
87-3555	RJ45 Continuity Tester

Lockable Wall Boxes

52-1023	3u x 360mm Deep Lockable Wall Rack 19inch Black Glass Door
52-1024	4u x 360mm Deep Lockable Wall Rack 19inch Black Glass Door
52-1026	6u x 360mm Deep Lockable Wall Rack 19inch Black Glass Door
52-4023	3u x 450mm Deep Lockable Wall Rack 19inch Black Glass Door
52-4024	4u x 450mm Deep Lockable Wall Rack 19inch Black Glass Door
52-4026	6u x 450mm Deep Lockable Wall Rack 19inch Black Glass Door

Copper Networking

Flat Pack Wall Cabinets | Wall Cabinets | Wall Cabinet Accessories | 10inch Cabinet | Wall Brackets | Cable Dump Panels

PART NO	DESCRIPTION

Flat Pack Wall Cabinets

52-6U450BLK-FLAT	6u Wall Cabinet 450 Deep Black (Flatpack)
52-6U600BLK-FLAT	6u Wall Cabinet 600 Deep Black (Flatpack)
52-9U450BLK-FLAT	9u Wall Cabinet 450 Deep Black (Flatpack)
52-9U600BLK-FLAT	9u Wall Cabinet 600 Deep Black (Flatpack)
52-12U450BLK-FLAT	12u Wall Cabinet 450 Deep Black (Flatpack)
52-12U600BLK-FLAT	12u Wall Cabinet 600 Deep Black (Flatpack)
52-15U450BLK-FLAT	15u Wall Cabinet 450 Deep Black (Flatpack)
52-15U600BLK-FLAT	15u Wall Cabinet 600 Deep Black (Flatpack)

Wall Cabinets

52-6U450BLK	6u Wall Cabinet 450 Deep Black
52-6U600BLK	6u Wall Cabinet 600 Deep Black
52-9U450BLK	9u Wall Cabinet 450 Deep Black
52-9U600BLK	9u Wall Cabinet 600 Deep Black
52-12U450BLK	12u Wall Cabinet 450 Deep Black
52-12U600BLK	12u Wall Cabinet 600 Deep Black
52-15U450BLK	15u Wall Cabinet 450 Deep Black
52-15U600BLK	15u Wall Cabinet 600 Deep Black

PART NO	DESCRIPTION

Wall Cabinet Accessories

52-1998	1u 200mm Cantilever Vented Shelf Black (20Kg)
52-1999	1u 300mm Cantilever Vented Shelf Black (450mm Cab) (20Kg)
52-2000	1u 350mm Cantilever Vented Shelf Black (600mm Cab) (20Kg)
52-2004	2u 300mm Cantilever Vented Shelf Black (450mm Cab) (20Kg)
52-2005	2u 350mm Cantilever Vented Shelf Black (600mm Cab) (20Kg)
52-2006	2u 400mm Cantilever Vented Shelf Black (20Kg)
52-2010	Adjustable Shelf (Adjustable 559mm to 1023mm) (70Kg Max)
52-1980	2 Way 1u Fan Shelf 19inch Rackmountable (170mm Depth)
52-1984	1u Digital Temperature Unit (2 Way Fan)
52-1900	Spare Keys for Wall Cabinets
52-3108	Cage Nuts & Screws M6 Silver (PK 50)
CAGENUTBK	Black Cage Nuts & Screws (PK 50)

10inch Cabinet

XXRCAB6U	6u 10inch SOHO Wall Mount Cabinet 280W x 310D Black (Flat Pack)
XXRCAB9U	9u 10inch SOHO Wall Mount Cabinet 280W x 310D Black
XXRPNL6	12 Port 10inch Cat6 UTP Patch Panel
XXRPNLKS12	1u 10inch 12 Port Keystone Patch Panel
XXRSHELF10	1u 10inch Cantilever Shelf Black

Wall Brackets

52-0020	2u 300mm Hinged Wall Bracket
52-0030	3u 300mm Hinged Wall Bracket
52-0040	4u 300mm Hinged Wall Bracket
52-0060	6u 300mm Hinged Wall Bracket

Cable Dump Panels

72-2690	1u Cable Dump Panel Plastic Black with Pass Through
72-2691	2u Cable Dump Panel Plastic Black with Pass Through

CABLENET

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VELCRO® Brand Cable Straps

PART NO	DESCRIPTION

VELCRO® Brand Cable Straps

VELCRO® Brand ONE-WRAP® Tape   WHITE

PART NO	DESCRIPTION
VEL-OW64100	25m Reel x 10mm Velcro One Wrap Continuous Tape White
VEL-OW64113	25m Reel x 13mm Velcro One Wrap Continuous Tape White
VEL-OW64126	25m Reel x 16mm Velcro One Wrap Continuous Tape White
VEL-OW64139	25m Reel x 20mm Velcro One Wrap Continuous Tape White
VEL-OW64800	25m Reel x 25mm Velcro One Wrap Continuous Tape White
VEL-OW64178	25m Reel x 50mm Velcro One Wrap Continuous Tape White

VELCRO® Brand ONE-WRAP® Tape   BLACK

PART NO	DESCRIPTION
VEL-OW64101	25m Reel x 10mm Velcro One Wrap Continuous Tape Black
VEL-OW64114	25m Reel x 13mm Velcro One Wrap Continuous Tape Black
VEL-OW64127	25m Reel x 16mm Velcro One Wrap Continuous Tape Black
VEL-OW64140	25m Reel x 20mm Velcro One Wrap Continuous Tape Black
VEL-OW64153	25m Reel x 25mm Velcro One Wrap Continuous Tape Black
VEL-OW64179	25m Reel x 50mm Velcro One Wrap Continuous Tape Black
VEL-OW64102	25m Reel x 10mm FRT Velcro One Wrap Continuous Tape Black
VEL-OW64115	25m Reel x 13mm FRT Velcro One Wrap Continuous Tape Black
VEL-OW64128	25m Reel x 16mm FRT Velcro One Wrap Continuous Tape Black
VEL-OW64141	25m Reel x 20mm FRT Velcro One Wrap Continuous Tape Black

VELCRO® Brand ONE-WRAP® Tape   AQUA

PART NO	DESCRIPTION
VEL-OW64110	25m Reel x 10mm Velcro One Wrap Continuous Tape Aqua
VEL-OW64136	25m Reel x 16mm Velcro One Wrap Continuous Tape Aqua
VEL-OW64149	25m Reel x 20mm Velcro One Wrap Continuous Tape Aqua
VEL-OW64162	25m Reel x 25mm Velcro One Wrap Continuous Tape Aqua

VELCRO® Brand ONE-WRAP® Tape   PURPLE

PART NO	DESCRIPTION
VEL-OW64107	25m Reel x 10mm Velcro One Wrap Continuous Tape Purple
VEL-OW64120	25m Reel x 13mm Velcro One Wrap Continuous Tape Purple
VEL-OW64133	25m Reel x 16mm Velcro One Wrap Continuous Tape Purple
VEL-OW64146	25m Reel x 20mm Velcro One Wrap Continuous Tape Purple
VEL-OW64159	25m Reel x 25mm Velcro One Wrap Continuous Tape Purple

PART NO	DESCRIPTION

VELCRO® Brand ONE-WRAP® Tape   ORANGE

PART NO	DESCRIPTION
VEL-OW64111	25m Reel x 10mm Velcro One Wrap Continuous Tape Orange
VEL-OW64137	25m Reel x 16mm Velcro One Wrap Continuous Tape Orange
VEL-OW64150	25m Reel x 20mm Velcro One Wrap Continuous Tape Orange
VEL-OW64163	25m Reel x 25mm Velcro One Wrap Continuous Tape Orange

VELCRO® Brand ONE-WRAP® Tape   ROYAL BLUE

PART NO	DESCRIPTION
VEL-OW64103	25m Reel x 10mm Velcro One Wrap Continuous Tape Royal Blue

Other colour options are available. Please contact our sales team for more details.

VELCRO® Brand ONE-WRAP® Strap   BLACK

PART NO	DESCRIPTION
VEL-OW64301	13mm x 200mm 25pcs Roll Velcro One Wrap Strap Black
VEL-OW64401	20mm x 150mm 25pcs Roll Velcro One Wrap Strap Black
VEL-OW64601	20mm x 230mm 25pcs Roll Velcro One Wrap Strap Black
VEL-OW64701	20mm x 330mm 25pcs Roll Velcro One Wrap Strap Black
VEL-OW64801	25mm x 300mm 25pcs Roll Velcro One Wrap Strap Black
VEL-OW64327	13mm x 200mm 100pcs Roll Velcro One Wrap Strap Black
VEL-OW64527	20mm x 200mm 100pcs Roll Velcro One Wrap Strap Black
VEL-OW64627	20mm x 230mm 100pcs Roll Velcro One Wrap Strap Black
VEL-OW64727	20mm x 330mm 100pcs Roll Velcro One Wrap Strap Black
VEL-OW64827	25mm x 300mm 100pcs Roll Velcro One Wrap Strap Black
VEL-OW64366	13mm x 200mm 750pcs Spool Velcro One Wrap Strap Black
VEL-OW64466	20mm x 150mm 750pcs Spool Velcro One Wrap Strap Black
VEL-OW64566	20mm x 200mm 750pcs Spool Velcro One Wrap Strap Black
VEL-OW64766	20mm x 330mm 700pcs Spool Velcro One Wrap Strap Black
VEL-OW64866	25mm x 300mm 750pcs Spool Velcro One Wrap Strap Black
VEL-OW64367	13mm x 200mm 750pcs Spool FRT Velcro One Wrap Strap Black
VEL-OW64567	20mm x 200mm 750pcs Spool FRT Velcro One Wrap Strap Black
VEL-OW64767	20mm x 330mm 750pcs Spool FRT Velcro One Wrap Strap Black
VEL-OW64867	25mm x 300mm 750pcs Spool FRT Velcro One Wrap Strap Black

VELCRO® Brand ONE-WRAP® Strap   WHITE

PART NO	DESCRIPTION
VEL-OW64400	20mm x 150mm 25pcs Roll Velcro One Wrap Strap White

Copper Networking

PART NO	DESCRIPTION

Cable Ties

Bulk Packed Cable Ties
94-CT100	Cabletie 2.5mm x 100mm Neutral (PK 100)
94-CT100BL	Cabletie 2.5mm x 100mm Black (PK 100)
CTIE1-1OR	Cabletie 2.5mm x 100mm Orange (PK 100)
CTIE1-1RD	Cabletie 2.5mm x 100mm Red (PK 100)
CABTIE10-1	Cabletie 3.6mm x 150mm Black (PK 100)
94-CT200	Cabletie 4.8mm x 200mm Neutral (PK 100)
94-CT200BL	Cabletie 4.8mm x 200mm Black (PK 100)
CTIE3-1BL	Cabletie 4.8mm x 200mm Blue (PK 100)
CTIE3-1OR	Cabletie 4.8mm x 200mm Orange (PK 100)
CTIE3-1YL	Cabletie 4.8mm x 200mm Yellow (PK 100)
94-CT300	Cabletie 4.8mm x 300mm Neutral (PK 100)
94-CT300BL	Cabletie 4.8mm x 300mm Black (PK 100)
94-CT370	Cabletie 4.8mm x 370mm Neutral (PK 100)
94-CT370BL	Cabletie 4.8mm x 370mm Black (PK 100)
CABTIE7	Cabletie 2.5mm x 200mm Black (PK 1000)
CABTIE3	Cabletie 4.8mm x 200mm Black (PK 1000)
CABTIE5	Cabletie 4.8mm x 300mm Black (PK 1000)

Self Adhesive Cable Tie Bases
SBASE20B	Cabletie Base 20mm x 20mm Black (PK 100)
SBASE20N	Cabletie Base 20mm x 20mm Neutral (PK 100)
SBASE28B	Cabletie Base 28mm x 28mm Black (PK 100)
SBASE28N	Cabletie Base 28mm x 28mm Neutral (PK 100)

RETYZ Reusable Cable Ties
EVT-S08BK-TA	200mm x 4.8mm Black - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S08BL-TA	200mm x 4.8mm Blue - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S08FG-TA	200mm x 4.8mm Fluo Green - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S08FO-TA	200mm x 4.8mm Fluo Orange - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S08NL-TA	200mm x 4.8mm Natural/White - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S08OR-TA	200mm x 4.8mm Orange - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S08PR-TA	200mm x 4.8mm Purple - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12BK-TA	300mm x 4.8mm Black - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12BL-TA	300mm x 4.8mm Blue - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12BR-TA	300mm x 4.8mm Brown - RETYZ Reusable Cable Zip Tie (PK 100)

PART NO	DESCRIPTION
EVT-S12FG-TA	300mm x 4.8mm Fluo Green - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12FO-TA	300mm x 4.8mm Fluo Orange - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12GN-TA	300mm x 4.8mm Green - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12GY-TA	300mm x 4.8mm Grey - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12NL-TA	300mm x 4.8mm Natural/White - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12OR-TA	300mm x 4.8mm Orange - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12PR-TA	300mm x 4.8mm Purple - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12RD-TA	300mm x 4.8mm Red - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S12YW-TA	300mm x 4.8mm Yellow - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S16BK-TA	400mm x 5.6mm Black - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S16BL-TA	400mm x 5.6mm Blue - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S16FG-TA	400mm x 5.6mm Fluo Green - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S16FO-TA	400mm x 5.6mm Fluo Orange - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S16NL-TA	400mm x 5.6mm Natural - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S16OR-TA	400mm x 5.6mm Orange - RETYZ Reusable Cable Zip Tie (PK 100)
EVT-S16PR-TA	400mm x 5.6mm Purple - RETYZ Reusable Cable Zip Tie (PK 100)

Braided Sleeving

Braided Sleeving LSOH   BLACK
SLEEV-5B	100m Braided Sleeving 2mm-7mm (10mm max) LSOH Black
SLEEV-10B	100m Braided Sleeving 5mm-12mm (18mm max) LSOH Black
SLEEV-15B	50m Braided Sleeving 8mm-17mm (25mm max) LSOH Black
SLEEV-20B	25m Braided Sleeving 10mm-21mm (29mm max) LSOH Black
SLEEV-25B	25m Braided Sleeving 14mm-25mm (36mm max) LSOH Black
SLEEV-30B	25m Braided Sleeving 18mm-32mm (45mm max) LSOH Black
SLEEV-40B	25m Braided Sleeving 20mm-40mm (64mm max) LSOH Black
SLEEV-50B	25m Braided Sleeving 30mm-55mm (75mm max) LSOH Black
SLEEV-50B-100	100m Braided Sleeving 30mm-55mm (75mm max) LSOH Black

Braided Sleeving LSOH   WHITE
SLEEV-10WHI	100m Braided Sleeving 5mm-12mm (18mm max) LSOH White
SLEEV-15WHI	50m Braided Sleeving 8mm-17mm (25mm max) LSOH White
SLEEV-20WHI	25m Braided Sleeving 10mm-21mm (29mm max) LSOH White
SLEEV-25WHI	25m Braided Sleeving 14mm-25mm (36mm max) LSOH White
SLEEV-30WHI	25m Braided Sleeving 18mm-32mm (45mm max) LSOH White
SLEEV-40WHI	25m Braided Sleeving 20mm-40mm (64mm max) LSOH White

Tel. 01276 405300   **Email. sales@cablenet.co.uk**   **Web. www.cablenet.co.uk**

PART NO	DESCRIPTION
Braided Sleeving LSOH GREY	
SLEEV-G20	25m Braided Sleeving 10mm-21mm (29mm max) LSOH Grey
SLEEV-G25	25m Braided Sleeving 14mm-25mm (36mm max) LSOH Grey
SLEEV-G30	25m Braided Sleeving 18mm-32mm (45mm max) LSOH Grey
SLEEV-G50	25m Braided Sleeving 30mm-55mm (75mm max) LSOH Grey

Cable Protection Strips

72-2821	Multi 3 Metre (30mm x 10mm) Black
72-2822	Multi 9 Metre (30mm x 10mm) Black
72-2876	Combi 3 Metre (16mm x 10mm + 16mm x 10mm) Grey
72-2882	Comnet 9 Metre (16mm x 12mm + 32mm x 12mm) Black
72-2891	Double 3 Metre (2 x 11mm Diameter) Black
72-2892	Double 9 Metre (2 x 11mm Diameter) Black
72-2946	Lowvolt 9 Metre (30mm x 10mm) Yellow

PVC Insulation Tape

PVCT19BLK	PVC Insulation Tape 19mm x 33m Black
PVCT19G-Y	PVC Insulation Tape 19mm x 33m Green/Yellow
PVCT19RED	PVC Insulation Tape 19mm x 33m Red
PVCT19WTE	PVC Insulation Tape 19mm x 33m White

Flexible Conduit

Flexible LSOH Black Conduit & Accessories

PPD25-5MASS	5m x 25mm LSOH Flexible Conduit Black Fitted with Glands & Nuts
PPD32-5MASS	5m x 32mm LSOH Flexible Conduit Black Fitted with Glands & Nuts
PPD25-50M	50m x 25mm LSOH Flexible Conduit Coil Black
PPD32-50M	50m x 32mm LSOH Flexible Conduit Coil Black
PVF25BL	25mm Slit Threaded Gland & Locknut Black (PK 10)

PART NO	DESCRIPTION
Flexible White Conduit & Accessories	
PPD25WH-50M	50m x 25mm LSOH Flexible Conduit Coil White

Sold in packs of 10 or 100

Other colour & length options available - please contact our sales team for more information.
Other conduit accessories available - please contact our sales team for more information.

MPTL Cable Adaptors

- MPTL Cable adaptors are designed for use in connecting IP devices to the network, including cameras, wireless access points and PoE lighting systems.

- Allow fast, easy deployment of remote devices when the length of connection is unknown. Easy and quick to use with adds, moves and changes and are much less disruptive.

- MPTL leads improve security by eliminating visible and accessible patch leads that can be intentionally or unintentionally disconnected from a device. Ideal for publicly mounted access points or surveillance cameras.

- They can be used as intermediate connection points between the ceiling consolidation points, ready for when the end devices are installed.

- They also eliminate the need to use field terminated RJ45 plugs to connect directly to end devices.

PART NO	DESCRIPTION

MPTL Cable Adaptors

Cat6a MPTL Cable Adaptor

72-6001	0.15m MPTL Cat6a Black S/FTP LSOH 26AWG Cable Adaptor
72-6005	0.5m MPTL Cat6a Black S/FTP LSOH 26AWG Cable Adaptor
72-6010	1m MPTL Cat6a Black S/FTP LSOH 26AWG Cable Adaptor
72-6030	3m MPTL Cat6a Black S/FTP LSOH 26AWG Cable Adaptor
72-8001	0.15m MPTL Cat6a White S/FTP LSOH 26AWG Cable Adaptor
72-8005	0.5m MPTL Cat6a White S/FTP LSOH 26AWG Cable Adaptor
72-8010	1m MPTL Cat6a White S/FTP LSOH 26AWG Cable Adaptor
72-8030	3m MPTL Cat6a White S/FTP LSOH 26AWG Cable Adaptor

Other lengths & colours available, please ask our sales team

Copper Networking

Cat6a 30AWG Patch Cable | Cat6a Patch Cable | Cat6 Patch Cable

PART NO	DESCRIPTION

Cat6a 30AWG Patch Cable
S/FTP Stranded (500m) LSOH

39-3440	Cat6a Orange S/FTP LSOH 30AWG Stranded Patch Cable 500m Reel
39-3441	Cat6a Grey S/FTP LSOH 30AWG Stranded Patch Cable 500m Reel
39-3442	Cat6a Red S/FTP LSOH 30AWG Stranded Patch Cable 500m Reel
39-3443	Cat6a Blue S/FTP LSOH 30AWG Stranded Patch Cable 500m Reel
39-3444	Cat6a Green S/FTP LSOH 30AWG Stranded Patch Cable 500m Reel
39-3445	Cat6a Black S/FTP LSOH 30AWG Stranded Patch Cable 500m Reel
39-3446	Cat6a White S/FTP LSOH 30AWG Stranded Patch Cable 500m Reel

Cat6a Patch Cable
S/FTP Stranded (500m) LSOH

39-3418	Cat6a Orange S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3419	Cat6a Pink S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3420	Cat6a Grey S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3421	Cat6a Red S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3422	Cat6a Blue S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3423	Cat6a Green S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3424	Cat6a Yellow S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3425	Cat6a Black S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3426	Cat6a Violet S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3427	Cat6a White S/FTP LSOH 26AWG Stranded Patch Cable 500m Reel

Cat6 Patch Cable
U/UTP Stranded (305m) PVC

39-3100	Cat6 Grey U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3101	Cat6 Red U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3102	Cat6 Blue U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3103	Cat6 Green U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3104	Cat6 Yellow U/UTP PVC 24AWG Stranded Patch Cable 305m Box

PART NO	DESCRIPTION
39-3105	Cat6 Black U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3106	Cat6 Violet U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3107	Cat6 White U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3108	Cat6 Orange U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3109	Cat6 Pink U/UTP PVC 24AWG Stranded Patch Cable 305m Box

U/UTP Stranded (500m) PVC

39-3200	Cat6 Grey U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3202	Cat6 Blue U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3204	Cat6 Yellow U/UTP PVC 24AWG Stranded Patch Cable 500m Reel

U/UTP Stranded (305m) LSOH

39-3110	Cat6 Grey U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3111	Cat6 Red U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3112	Cat6 Blue U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3113	Cat6 Green U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3114	Cat6 Yellow U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3116	Cat6 White U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3118	Cat6 Orange U/UTP LSOH 24AWG Stranded Patch Cable 305m Box

U/UTP Stranded (500m) LSOH

39-3310	Cat6 Grey U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel
39-3316	Cat6 Violet U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel

S/FTP (PIMF) Stranded PVC

39-3402	Cat6 Blue S/FTP (PIMF) PVC 26AWG Stranded Patch Cable 500m Reel
39-3403	Cat6 Green S/FTP (PIMF) PVC 26AWG Stranded Patch Cable 500m Reel
39-3400	Cat6 Grey S/FTP (PIMF) PVC 26AWG Stranded Patch Cable 500m Reel
39-3401	Cat6 Red S/FTP (PIMF) PVC 26AWG Stranded Patch Cable 500m Reel
39-3404	Cat6 Yellow S/FTP (PIMF) PVC 26AWG Stranded Patch Cable 500m Reel

F/UTP Stranded (500m) LSOH

39-3405	Cat6 Grey F/UTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3406	Cat6 Red F/UTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3407	Cat6 Blue F/UTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3408	Cat6 Green F/UTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3409	Cat6 Yellow F/UTP LSOH 26AWG Stranded Patch Cable 500m Reel
39-3410	Cat6 Black F/UTP LSOH 26AWG Stranded Patch Cable 500m Reel

Copper Networking

PART NO	DESCRIPTION
U/UTP Stranded LSOH	
39-3115	Cat6 Black U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3117	Cat6 Violet U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-3318	Cat6 Orange U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel

Cat5e Patch Cable

F/UTP Stranded (305m) PVC	
39-3637	Cat5e Black F/UTP PVC 26AWG Stranded Patch Cable 305m Box
39-3632	Cat5e Grey F/UTP PVC 26AWG Stranded Patch Cable 305m Box
39-3634	Cat5e Red F/UTP PVC 26AWG Stranded Patch Cable 305m Box
39-3636	Cat5e Yellow F/UTP PVC 26AWG Stranded Patch Cable 305m Box
F/UTP Stranded (500m) PVC	
39-3732	Cat5e Grey F/UTP PVC 26AWG Stranded Patch Cable 500m Reel
39-3736	Cat5e Yellow F/UTP PVC 26AWG Stranded Patch Cable 500m Reel
F/UTP Stranded (305m) LSOH	
39-3642	Cat5e Grey F/UTP LSOH 26AWG Stranded Patch Cable 305m Box
39-3638	Cat5e Red F/UTP LSOH 26AWG Stranded Patch Cable 305m Box
39-3639	Cat5e Blue F/UTP LSOH 26AWG Stranded Patch Cable 305m Box
39-3640	Cat5e Green F/UTP LSOH 26AWG Stranded Patch Cable 305m Box
39-3641	Cat5e Yellow F/UTP LSOH 26AWG Stranded Patch Cable 305m Box
39-3643	Cat5e Black F/UTP LSOH 26AWG Stranded Patch Cable 305m Box
U/UTP Stranded (305m) PVC	
39-3620	Cat5e Black U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3628	Cat5e Blue U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3617	Cat5e Brown U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3627	Cat5e Green U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3625	Cat5e Grey U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3618	Cat5e Orange U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3619	Cat5e Pink U/UTP PVC 24AWG Stranded Patch Cable 305m Box

PART NO	DESCRIPTION
39-3626	Cat5e Red U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3630	Cat5e Violet U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3621	Cat5e White U/UTP PVC 24AWG Stranded Patch Cable 305m Box
39-3629	Cat5e Yellow U/UTP PVC 24AWG Stranded Patch Cable 305m Box
U/UTP Stranded (500m) PVC	
39-3520	Cat5e Black U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3528	Cat5e Blue U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3527	Cat5e Green U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3525	Cat5e Grey U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3518	Cat5e Orange U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3519	Cat5e Pink U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3526	Cat5e Red U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3530	Cat5e Violet U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3521	Cat5e White U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
39-3529	Cat5e Yellow U/UTP PVC 24AWG Stranded Patch Cable 500m Reel
U/UTP Stranded (305m) LSOH	
39-7002	Cat5e Blue U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-7003	Cat5e Green U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-7000	Cat5e Grey U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-7001	Cat5e Red U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-7004	Cat5e Yellow U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-7005	Cat5e Black U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
39-7006	Cat5e White U/UTP LSOH 24AWG Stranded Patch Cable 305m Box
U/UTP Stranded (500m) LSOH	
39-7013	Cat5e Green U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel
39-7010	Cat5e Grey U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel
39-7018	Cat5e Orange U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel
39-7011	Cat5e Red U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel
39-7016	Cat5e Violet U/UTP LSOH 24AWG Stranded Patch Cable 500m Reel

Copper Networking

RJ45 Plugs & Boots

PART NO	DESCRIPTION

RJ45 Plugs & Boots

22-2096	Cat6a RJ45 FTP Crimp Plug Large 8mm OD (PK 10) - Need Tool 87-2810
22-2098A	Cat6 RJ45 FTP 50u Crimp Plug Stranded (2 Part)
22-2098A-B	Cat6 RJ45 FTP 50u Crimp Plug Stranded (2 Part) (PK 50)
22-2100A	Cat6 RJ45 UTP 50u Crimp Plug Stranded (2 Part)
22-2100A-B	Cat6 RJ45 UTP 50u Crimp Plug Stranded (2 Part) (PK 50)
22-2106	Cat6 RJ45 UTP 50u Crimp Plug Solid/Stranded (1 Part)
22-2106B	Cat6 RJ45 UTP 50u Crimp Plug Solid/Stranded (1 Part) (PK 50)
22-2097	Cat6/Cat6a RJ45 FTP Plug Up To 7mm OD (3 Part)
22-2097B	Cat6/Cat6a RJ45 FTP Plug Up To 7mm OD (3 Part) (PK 50)
22-2095	Cat5e RJ45 UTP Round Crimp Plug Solid
22-2095B	Cat5e RJ45 UTP Round Crimp Plug Solid (PK 50)
22-2101	Cat5e RJ45 UTP Flat Crimp Plug Stranded
22-2103	RJ45 UTP 50u Crimp Plug Stranded (Snagless)
22-2103B	RJ45 UTP 50u Crimp Plug Stranded (Snagless) (PK 50)
22-2099	RJ45 UTP 3u Crimp Plug Stranded
22-2102	RJ45 STP 50u Crimp Plug Solid/Stranded
22-2102B	RJ45 STP 50u Crimp Plug Solid/Stranded (PK 50)
22-2142	RJ10 4P4C 24-26AWG Crimp Plug Stranded
22-2143	RJ11 6P4C 24-26AWG Crimp Plug Stranded
22-2131	RJ12 6P6C 24-26AWG Crimp Plug Stranded

RJ45 Snagless Boot 6.5mm

22-2059	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Grey 6.5mm
22-2060	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Red 6.5mm
22-2061	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Blue 6.5mm
22-2062	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Green 6.5mm
22-2063	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Yellow 6.5mm
22-2064	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Black 6.5mm
22-2065	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Violet 6.5mm
22-2066	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot White 6.5mm
22-2067	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Orange 6.5mm
22-2068	RJ45 Snagless Strain Relief Cat 6 Blade Flush Boot Pink 6.5mm

RJ45 Cat6a Boot

22-2080	RJ45 Cat6a Bubble Boot Grey 6.5mm
22-2081	RJ45 Cat6a Bubble Boot Red 6.5mm
22-2082	RJ45 Cat6a Bubble Boot Blue 6.5mm

RJ45 Plugs & Boots

PART NO	DESCRIPTION
22-2083	RJ45 Cat6a Bubble Boot Green 6.5mm
22-2084	RJ45 Cat6a Bubble Boot Yellow 6.5mm
22-2085	RJ45 Cat6a Bubble Boot Orange 6.5mm
22-2086	RJ45 Cat6a Bubble Boot Black 6.5mm
22-2087	RJ45 Cat6a Bubble Boot Violet 6.5mm
22-2088	RJ45 Cat6a Bubble Boot White 6.5mm
22-2089	RJ45 Cat6a Bubble Boot Pink 6.5mm
22-2090	RJ45 Snagless Boot 8mm Clear for use with 22 2096
22-2091	RJ45 Snagless Boot 8mm Black for use with 22 2096

RJ45 Bubble Boot

22-2108	RJ45 Bubble Boot Black 6mm
22-2109	RJ45 Bubble Boot Pink 6mm
22-2110	RJ45 Bubble Boot Blue 6mm
22-2111	RJ45 Bubble Boot White 6mm
22-2112	RJ45 Bubble Boot Orange 6mm
22-2113	RJ45 Bubble Boot Green 6mm
22-2116	RJ45 Bubble Boot Grey 6mm
22-2118	RJ45 Bubble Boot Red 6mm
22-2122	RJ45 Bubble Boot Violet 6mm
22-2124	RJ45 Bubble Boot Yellow 6mm

Easy Plug RJ45 Solution

22-2205	Cat6 - RJ45 UTP EZ Easy Plug
22-2206	Cat6 - RJ45 FTP EZ Easy Plug
22-2203	Cat5e - RJ45 UTP EZ Easy Plug
22-2204	Cat5e - RJ45 FTP EZ Easy Plug
22-2093	EZ Easy Plug RJ45 Boot
87-2803	EZ Easy Plug Crimping Tool
87-2813	EZ Easy Plug Cable Stripper
22-2094	EZ Easy Plug Plastic Carrying Case

EZ-Path Fire Stopping Devices

Copper Networking

PART NO	DESCRIPTION

EZ-Path Fire Stopping Devices

CM250018	EZ-Path Series 33 Fire Stopping Device 76mm x 76mm x 267mm
CM250058	EZ-Path Series 44+ Fire Stopping Device 102mm x 116mm x 356mm
CM250078	EZ-Path Series 33 Fire Stopping Device Extension 76mm x 76mm x 152mm
CM250178	EZ-Path Series 44+ Fire Stopping Device Extension 102mm x 116mm x 152mm
CM250220	EZ-Path Series 33 Fire Stopping Device 1 Gang Floor Fixing Plate
CM250240	EZ-Path Series 33 Fire Stopping Device 1 Gang Wall Fixing Plate Pair
CM350700	EZ-Path Series 44+ Fire Stopping Device 1 Gang Wall Fixing Plate Pair (up to 90 minute)
CM350701	EZ-Path Series 44+ Fire Stopping Device 1 Gang Retrofit Wall Fixing Plate Pair
CM350702	EZ-Path Series 44+ Fire Stopping Device 1 to 5 Gang Wall Fixing Plate Pair (up to 90 minute)
CM350703	EZ-Path Series 44+ Fire Stopping Device 1 Gang Floor Fixing plate (up to 90 minute)
CM350704	EZ-Path Series 44+ Fire Stopping Device 2 to 5 Gang Floor Fixing Plate Pair
CM350705	EZ-Path Fire Stop Grommet 25mm
CM250120	EZ-Path Series 33 Fire Stopping Device 2 Gang Wall Fixing Plate Pair
CM250130	EZ-Path Series 33 Fire Stopping Device 3 Gang Wall Fixing Plate Pair
CM250140	EZ-Path Series 33 Fire Stopping Device 4 Gang Wall Fixing Plate Pair
CM250170	EZ-Path Series 33 Fire Stopping Device 7 Gang Wall Fixing Plate Pair
CM250230	EZ-Path Series 44+ Fire Stopping Device 1 Gang Wall Fixing Plate Pair (2 Hour)
CM250250	EZ-Path Series 44+ Fire Stopping Device 1 to 5 Gang Wall Fixing Plate Pair (2 Hour)
CM250260	EZ-Path Series 44+ Fire Stopping Device 1 Gang Floor Fixing Plate (2 Hour)

Single cable devices available for cable up to 14mm in diameter

Modular plates allow for increased capacity

Certified for use with ROCKWOOL ablative coated batt

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In our in-house manufacturing facility, we manufacture thousands of cable assemblies per month and can make almost any type of cable or cable assembly, whether it be standard or custom cables.

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Services offered by our In-House Workshop include:

TELCO Assemblies

Cat5e U/UTP PVC

Cat5e U/UTP LSOH

Cat5e F/UTP PVC

Cat6 U/UTP PVC

Cat6 U/UTP LSOH

Cat6 S/FTP PIMF

Cat6a S/FTP LSOH

S110 Cables

RJ10/11/12 Cables

Modular Adaptors

24 Port Punchdown

Hydra Cable

Telco Panel

Neutrik NAS cables

BNC RG59 and RG58/ASB720

For precise lengths:

BNC Panels

Power Leads

RG179 Cables

CABLENET   Tel. **01276 405300**   Email. **sales@cablenet.co.uk**   Web. **www.cablenet.co.uk**

Inside this section...

What Does OM1 to OM5 Mean?

Multi-mode cables can be found in OM1, OM2, OM3, OM4 and OM5 types. Each type has different properties.

OM5

OM5 New Standard developed when you are using Shortwave Wavelength Division Multiplexing (SWDM) applications. For 10 Gigabit and 100 Gigabit Ethernet it only transmits at the same distance as the low cost OM3 and OM4 Fibre. It has a suggested jacket colour of Lime Green. OM5 fibre, also known as WBMMF (wideband multimode fibre) at a minimum speed of 28Gbps per channel through the 850-953 nm window.

OM4

It is a further improvement to OM3, uses a 50µm core and was developed specifically for VSCEL laser transmission and allows 10 Gigabit Ethernet up to 550m compared to 300M with OM3 and 100 Gigabit Ethernet at lengths up to 150 meters. Often supplied in a jacket colour of Erika Violet to differentiate it from OM3 . It is completely backwards compatible with OM3 fibre.

OM3

Its core size is 50µm, but the cable is optimized for laser based equipment that uses fewer modes of light. As a result of this optimization, it is capable of running 10 Gigabit Ethernet at lengths up to 300 meters. Since its inception, production techniques have improved the overall capabilities of OM3 to enable its use with 40 Gigabit and 100 Gigabit Ethernet up to 100 meters. It has a suggested jacket colour of aqua .

OM2

Its core size is 50µm and was the original fibre to support 10 Gigabit Ethernet but only up to 82 meters and has been superseded by OM3 and OM4.

OM1

The original multimode fibre with a core size of 62.5 micrometres (µm). It can only support 10 Gigabit Ethernet at lengths up 33 meters. No longer a recognised LAN standard in data transmission.

Ethernet Cabling Guidelines

	Multimode Fibre OM3	Multimode Fibre OM4	Multimode Fibre OM5	Singlemode Fibre OS2 1310mm	Singlemode Fibre OS2 1550mm
10BASE-T (10Mb/s)	2000m	2000m		N/S	N/S
100BASE-T (100Mb/s)	2000m	2000m		N/S	N/S
1000BASE-T (GbE)	550m	1000m		5000m	N/S
10GBASE-T (10GbE)	300m	550m	400m	10000m	40000m
40GBASE-T (40GbE)	100m	100m	150m	10000m	40000m
100GBASE-T (100GbE)	100m	150m	150m	10000m	40000m

N/S = Not Specified

Advantages of Fibre Optic Cables

Design and installation

Fibre is lightweight and thin, with a strong pulling strength. Its small size makes it easier to handle, and it takes up much less space in cabling ducts. Fibre networks also enable you to put all your electronics and hardware in one central location, instead of having wiring closets with equipment throughout the building.

Greater bandwidth

Fibre provides greater bandwidth than copper and has standardized performance up to 10 Gbps along with futureproofing with speeds from 40 Gbps up to 400 Gbps.

Immunity and reliability

Fibre provides extremely reliable data transmission. It is completely immune to many environmental factors and because the core is made of glass, which is an insulator, no electric current can flow through. It is immune to electromagnetic interference and radio-frequency interference (EMI/RFI), crosstalk and impedance problems.

Low attenuation and greater distance

 very little signal loss occurs during transmission, and data can move at higher speeds and greater distances. Fibre does not have the 100-metre distance limitation of copper and Fibre distances can range from 300 meters to 100s kilometres, depending on the cable type used, cable, wavelength, and network.

Security Your data is safe with fibre cable. It does not radiate signals and is extremely difficult to tap. If the cable is tapped, it is very easy to monitor because the cable leaks light, causing the entire system to fail. If an attempt is made to break the physical security of your fibre system, you will know it.

IEEE 802.3 Multimode Ethernet Applications
All Speeds Fibre count IEEE 802.3 Ethernet multimode applications:

Application	No. of Fibres	Multimode Media	Operating Range	Standards Reference
1000BASE-LX	2	OM3 OM4/OM5	2 m to 600 m1	IEEE Std 802.3, Clause 38
1000BASE-SX	2	OM3 OM4/OM5	2 m to 1,000 m1 2 m to 1,100 m1	IEEE Std 802.3, Clause 38
10GBASE-LX4	2	OM3 OM4/OM5	2 m to 300 m	IEEE Std 802.3, Clause 53
10GBASE-SR	2	OM3 OM4/OM5	2 m to 300 m 2 m to 400 m	IEEE Std 802.3, Clause 52
25GBASE-SR	2	OM3 OM4/OM5	0.5 m to 70 m 0.5 m to 100 m	IEEE Std 802.3, Clause 112
40GBASE-SR4	8	OM3 OM4/OM5	0.5 m to 100 m 0.5 m to 150 m	IEEE Std 802.3, Clause 86
50GBASE-SR	2	OM3 OM4/OM5	0.5 m to 70 m 0.5 m to 100 m	IEEE Std 802.3, Clause 138
100GBASE-SR1	2	OM3 OM4/OM5	0.5 m to 60 m 0.5 m to 100 m	IEEE Std 802.3, Clause 167
100GBASE-SR2	4	OM3 OM4/OM5	0.5 m to 70 m 0.5 m to 100 m	IEEE Std 802.3, Clause 138
100GBASE-SR4	8	OM3 OM4/OM5	0.5 m to 100 m 0.5 m to 150 m	IEEE Std 802.3, Clause 95
100GBASE-SR10	20	OM3 OM4/OM5	0.5 m to 100 m 0.5 m to 150 m	IEEE Std 802.3, Clause 86
100GBASE-VR1	2	OM3 OM4/OM5	0.5 m to 30 m 0.5 m to 50 m	IEEE Std 802.3, Clause 167
200GBASE-SR2	4	OM3 OM4/OM5	0.5 m to 60 m 0.5 m to 100 m	IEEE Std 802.3, Clause 167
200GBASE-SR4	8	OM3 OM4/OM5	0.5 m to 70 m 0.5 m to 100 m	IEEE Std 802.3, Clause 138
200GBASE-VR2	4	OM3 OM4/OM5	0.5 m to 30 m 0.5 m to 50 m	IEEE Std 802.3, Clause 167
400GBASE-SR4	8	OM3, OM4/OM5	0.5 m to 60 m 0.5 m to 100 m	IEEE Std 802.3, Clause 167
400GBASE-SR4.2	8	OM3 OM4 OM5	0.5 m to 60 m 0.5 m to 100 m 0.5 m to 150 m	IEEE Std 802.3, Clause 150
400GBASE-SR8	16	OM3 OM4/OM5	0.5 m to 70 m 0.5 m to 100 m	IEEE Std 802.3, Clause 138
400GBASE-SR16	32	OM3 OM4/OM5	0.5 m to 70 m 0.5 m to 100 m	IEEE Std 802.3, Clause 123
400GBASE-VR4	8	OM3 OM4/OM5	0.5 m to 30 m 0.5 m to 50 m	IEEE Std 802.3, Clause 167

IEEE 802.3 Multimode Optical Fibre Ethernet Standards (TIA Standards)

There are three 50 μm-diameter multimode optical fibre types **recommended** by TIA Standards for new installations:

OM3 multimode was the first fibre designed for use with vertical-cavity surface-emitting lasers (VCSELs) light sources operating at the 850 nanometre (nm) wavelength.

OM4 multimode offers greater Effective Modal Bandwidth (EMB) than OM3 multimode to support longer operating ranges at the 850 nm wavelength.

OM5 multimode has the same EMB as OM4 multimode but is characterized at both 860 nm and 953 nm wavelengths to support longer operating ranges for applications using wavelength division multiplexed transmission schemes.

Multimode optical fibre cabling Ethernet networks are more **cost-effective** than same-speed single-mode optical fibre networks due to lower cost connectors (wider glass cores require less mechanical precision) and VCSEL light sources, which also consume less power than true lasers. The trade-off is that multimode optical fibre cabling Ethernet networks do not have the reach capability offered by single-mode optical fibre Ethernet networks.

The **key considerations** when planning a multimode optical fibre infrastructure capable of supporting multiple generations of Ethernet applications are: 1) desired data rate, 2) number of transmit fibres required, and 3) operating range. For example, the 2 fiber application tab below demonstrates that a migration path of 1000 Mb/s to 10 Gb/s to 100 Gb/s is achievable over up to 60 meters of OM3 optical fibre or up to 100 meters of OM4 (or OM5) optical fibre.

Parallel transmission schemes use more than 2 fibers to achieve higher data rates. For example, the 100GBASE SR4 signalling scheme transmits four lanes of 25 Gb/s to achieve a data rate of 100 Gb/s. Parallel transmission schemes require more optical fibres, but typically provide a more economical path to achieving higher speed transmission.

OM3, OM4, and OM5 had not been standardized when 1000BASE LX and 1000BASE SX were developed. Calculated operating range and insertion loss budget assume two standards compliant connector pairs in a channel and are provided for system planning purposes only.

There are two 9 μm-diameter single-mode optical fibre types **recommended** by TIA Standards for new installations:

Inside Building (OS1a) single mode has the highest cabled attenuation of all options, 1.0 dB/km at 1310 nanometre (nm) and 1550 nm wavelengths and supports indoor and short-haul local area network (LAN), data centre, enterprise, and FTTx or "last mile" applications.

Outside Building/Plant (OS2) single mode has the lowest cabled attenuation of all options, 0.4 dB/km at 1310 nm and 1550 nm, and is ideal for long-haul wide area network (WAN) applications Indoor-Outdoor single mode has a maximum cabled attenuation of 0.5 dB/km at 1310 nm and 1550 nm, which is less than OS1a but more than OS2, making it a good choice for between building and mid-haul metropolitan area network (MAN) applications

Both fibre types are characterized as **"low water peak"**, meaning the maximum attenuation requirement at 1383 nm is equivalent to the maximum attenuation specified at 1310 nm. This constraint eliminates the concern that the fibre will have high loss in the 1360 nm to 1460 nm band caused by OH ions absorbed during the manufacturing process. Low water peak characterization is critical to ensure support of applications that rely on wavelength division multiplexing (WDM) transmission schemes.

Optional bend insensitive single mode optical fibres have a lower index of refraction material surrounding the fibre that reflects light back into the core and are recommended when the optical fibres or cables have to support bend radii less than 1 in (25 mm).

Single mode optical fibre connectors require greater mechanical precision for proper alignment and higher wavelength transmitters consume more power, so single mode optical fibre networks and equipment tend to cost more than multimode systems. On the other hand, only single mode optical fibre Ethernet networks have the **extended transmission range** necessary to support hyperscale data centre, backbone, WAN, and MAN connections.

Desired data rate and operating range are the **primary considerations** when planning a single mode optical fibre infrastructure capable of supporting multiple generations of Ethernet applications. The single mode landscape is evolving, however. While single mode optical fibre transmission typically makes use of WDM schemes to increase throughput, some emerging short haul (e.g., 500 m) applications are beginning to specify more than 2 fibers in parallel transmission schemes to provide a more economical path to achieving higher speed transmission in LAN environments.

1. Operating range varies according to the type of single-mode optical fibre cable used.
2. 1275.7 nm, 1300.2 nm, 1324.7 nm, and 1349.2 nm
3. 1271 nm, 1291 nm, 1311 nm, and 1331 nm
4. 1295.56 nm, 1300.05 nm, 1304.58 nm, and 1309.14 nm
5. 1273.54 nm, 1277.89 nm, 1282.26 nm, 1286.66 nm, 1295.56 nm, 1300.05 nm, 1304.58 nm, and 1309.14 nm
6. Up to 48 channels between 1528.77 nm and 1566.31 nm over a DWDM "black link
7. Links longer than 30 km for the same link power budget are considered engineered links and must not exceed specified insertion loss.

IEEE 802.3 Single-mode Ethernet Applications
All Speeds Fibre count IEEE 802.3 Ethernet single-mode applications:

Application	No. of Fibres	Wavelength(s)	Operating Range	Standards Reference
1000BASE-LX	2	1310 nm	2 m to 5 km	IEEE Std 802.3, Clause 38
10GBASE-ER	2	1550 nm	2 m to 40 km7	IEEE Std 802.3, Clause 52
10GBASE-LX4	2	four WDM2	2 m to 10 km	IEEE Std 802.3, Clause 53
10GBASE-LR	2	1310 nm	2 m to 10 km	IEEE Std 802.3, Clause 52
25GBASE-ER	2	1310 nm	2 m to 40 km7	IEEE Std 802.3, Clause 114
25GBASE-LR	2	1310 nm	2 m to 10 km	IEEE Std 802.3, Clause 114
40GBASE-ER4	2	four WDM3	2 m to 40 km7	IEEE Std 802.3, Clause 87
40GBASE-FR	2	1550 nm	2 m to 2 km	IEEE Std 802.3, Clause 89
40GBASE-LR4	2	four WDM3	2 m to 10 km	IEEE Std 802.3, Clause 87
50GBASE-ER	2	1310 nm	2 m to 40 km7	IEEE Std 802.3, Clause 139
50GBASE-FR	2	1310 nm	2 m to 2 km	IEEE Std 802.3, Clause 139
50GBASE-LR	2	1310 nm	2 m to 10 km	IEEE Std 802.3, Clause 139
100GBASE-DR	2	1310 nm	2 m to 500 m	IEEE Std 802.3, Clause 140
100GBASE-ER4	2	four WDM4	2 m to 40 km7	IEEE Std 802.3, Clause 88
100GBASE-FR1	2	1310 nm	2 m to 2 km	IEEE Std 802.3, Clause 140
100GBASE-LR1	2	1310 nm	2 m to 10 km	IEEE Std 802.3, Clause 140
100GBASE-LR4	2	four WDM4	2 m to 10 km	IEEE Std 802.3, Clause 88
100GBASE-ZR	2	DWDM6	2 m to 80 km	IEEE Std 802.3, Clause 154
200GBASE-DR4	8	1310 nm	2 m to 500 m	IEEE Std 802.3, Clause 121
200GBASE-ER4	2	four WDM4	2 m to 40 km7	IEEE Std 802.3, Clause 122
200GBASE-FR4	2	four WDM3	2 m to 2 km	IEEE Std 802.3, Clause 122
200GBASE-LR4	2	four WDM4	2 m to 10 km	IEEE Std 802.3, Clause 122
400GBASE-DR4	8	1310 nm	2 m to 500 m	IEEE Std 802.3, Clause 124
400GBASE-ER8	2	eight WDM5	2 m to 40 km7	IEEE Std 802.3, Clause 122
400GBASE-FR4	2	four WDM3	2 m to 2 km	IEEE Std 802.3, Clause 151
400GBASE-FR8	2	eight WDM5	2 m to 2 km	IEEE Std 802.3, Clause 122
400GBASE-LR4-6	2	four WDM3	2 m to 6 km	IEEE Std 802.3, Clause 151
400GBASE-LR8	2	eight WDM5	2 m to 10 km	IEEE Std 802.3, Clause 122

What is the difference between Single mode UPC and APC?

Most of our customers are simply looking to minimize Insertion Loss and maximize Return Loss. This means they want as much light as possible to pass through the fibre to its destination and as little light as possible to bounce back to its source. For most applications, UPC will provide this for you. However, in some circumstances, you need more Return Loss than UPC can offer. That is when you use APC. If you have green connectors on your fibre or devices, you may need APC. APC is designed specifically to maximize return loss. APC ends are actually polished to have an ~8° angle on the end of the fibre. An APC end will almost always have a green connector to make it clear that the fibre is APC. The part that is actually polished to an angle is so small that you won't be able to tell it is angled from looking at it.

If you mix APC and UPC, the result can be tremendous insertion loss (meaning a lot of light will be lost at the point where you connect the APC to the UPC). So, if you have a port on your device that specifies it needs APC, you will need to use a cable with an APC end on it. If you have a cable with a green connector and you want to attach an adapter cable to the end, you will need to make sure an APC end connects to it.

How many types of Multimode Fibre?

Identified by ISO 11801 standard, multimode fibre optic cables can be classified into OM1 fibre, OM2 fibre, OM3 fibre, OM4 fibre and newly released OM5 fibre. The next part will compare these fibres from the side of core size, bandwidth, data rate, distance, colour and optical source in details.

Singlemode vs. Multimode

There are two types of Optical fibres, multimode and singlemode. In multimode fibres the light travels in multiple paths (modes) down the fibre, in a singlemode fibre the light travels as a single beam down the core of the fibre.

Single mode fibre is suitable for long distance applications, while multimode optical fibre is designed for short distance runs.

Fibres are defined by the ratio between the diameter of the core and the diameter of the cladding, expressed in microns (thousandths of a millimetre). There are two constructions of multimode fibre (50/125 and 62.5/125) and one construction of singlemode fibre (9/125).

The glass fibres then have a coloured plastic primary coating that takes the overall diameter up to 250 microns. This provides protection and strength to the glass fibres and enables individual fibres to be identified at each end of a fibre optic cable.

Multi-mode fibre is typically cost effective for inside buildings or corporate campuses while single-mode is better suited for longer distance runs. Single-mode fibre can transmit over greater distances but typically requires more expensive equipment. Multi-mode is cost effective for installations where the lengths don't exceed a few hundred meters.

Loose Tube vs. Tight Buffered

Loose Tube Cables

Loose Tube fibre optic cables are the type that has traditionally been used in telecommunications networks where they are predominantly installed in external environments. The 250 micron primary coated fibres are contained within a plastic tube which may or may not contain a water blocking gel. One or more tubes are then surrounded by some form of strength member before an outer sheath is applied. The outer sheath may be PVC, LSZH or PE, depending on the environment in to which the cable will be installed. The construction of a typical single loose tube cable is shown below.

Each loose tube will typically contain 12 fibres, although some constructions have up to 24 fibres in each tube. The use of multiple tubes in a single cable sheath mean that cables with several hundred fibres can be produced.

Tight Buffered Cables

A limitation of the loose tube fibre optic cable construction is its deployment in vertical cable runs. The 250 micron primary coated fibres are not supported in the loose tube which means that there can be significant stress on the fibres when installed vertically. One answer to this is to install loops of cable every 10m or so but the more common modern solution is to use a tight buffered construction.

The 250 micron primary coated fibres have an additional secondary coating (buffer) that has an overall diameter of 900 micron (0.9mm). The 900 micron buffered fibres are surrounded with a strength element and an overall sheath is then applied.

The strength elements may be Aramid Yarn or E-glass yarn and the sheath is typically a Universal Low Smoke Zero Halogen (ULSZH) material, making it suitable for use in both internal and external (when installed in a dry duct) environments. Tight buffered cables tend to have a maximum of 24 fibres but are suitable for both horizontal and vertical cable runs.

CPR Cable

For Bulk Fibre Cables that are covered by CPR please see pages 143-144 in the DataCentre section. Please be aware that Fibre Patch Cords are NOT covered by CPR regulations.

Fibre Optic Connectors

Unlike with copper cabling where one style of connector, the RJ45, dominates, with fibre there are a number of different connectors that can be used.

LC Connectors

The LC connector is sometimes referred to as a Small Form Factor (SFF) connector as it has much smaller dimensions than the SC connector. In fact it is possible to get twice as many fibres terminated on LC connectors in the space used by SC connectors. LC connectors have a simple latch, similar to that used on a RJ45 plug, making it familiar in use for network technicians. This has become the connector of choice in most new network fibre installations.

SC Connectors

The SC connector has a square format and has a push/pull latching mechanism. The image shows two SC connectors that have been joined using a special clip to create a SC Duplex connector with the A and B legs identified in the moulding of the clip.

ST Connectors

The ST connector has a round barrel and uses a bayonet fixing mechanism to secure it to the mating connector. It is not recommended for new installations and is only seen in legacy fibre deployments.

MPO/MTP® Connectors

The MPO or MTP® connector has larger dimensions than the LC Duplex connector but can accommodate up to 24 fibres in a single ferrule, making it ideal for high density installation. This style of connector is also finding favour in multi-channel fibre applications such as 40G and 100G Ethernet. However, the high precision nature of the connector means that it is not suitable for field termination.

SN®-MT Connector

The SN-MT is a revolutionary Very Small Form Factor (VSFF) connector with 2.7 times the density of MPO connectors. The SN-MT incorporates a single, compact SN.-MT ferrule and is compatible with next-generation 200 μm rollable ribbon cables.

The SN-MT connector is innovating hyperscale data center connectivity by offering optimized densification, simplified network build, future-proofing capabilities, ultra-low loss, and other benefits. The connector boasts an exceptional packing density, accommodating 3,456 fibers per 1RU in patch panels. This high-density design optimizes space utilization within data centers. Furthermore, it simplifies network build by eliminating the need for cassettes and sliding trays. With the SN-MT16 Connector, deployment times are reduced, fewer connectors are needed in the link, and the overall build process becomes more streamlined.

It supports transceivers available for 4 x 800G. This capability allows data centers to keep pace with increasing bandwidth demands. With the SN-MT16 Connector, data centers can confidently scale their operations and adapt to evolving network requirements. The SN-MT16 Connector offers an ultra-low insertion loss of less than 0.35dB per mated connector pair, guaranteeing repeatable and reliable links. Its high-performance MT ferrules and alignment pins further improve reliability, ensuring stable connections and optimal network performance.

It features a push-pull boot, facilitating fast and effortless insertion and removal. Its flex angle boot provides superior bend protection and strain relief. The different keys on the upper and lower surfaces of the connector ensure repeatable and clear alignment upon insertion into the adapter, simplifying installation and reducing the risk of misalignment. It also incorporates multi-port shuttered adapters, offering increased ingress protection and enhancing laser safety for users. In addition to its performance benefits, the SN-MT16 Connector embraces sustainability by utilizing up to 67% less plastic. This eco-friendly design reduces the environmental footprint, aligning with the industry's growing commitment to sustainability.

SN Connector-Based Connectivity

The most commonly used connector types in the industry today are LC and MPO. The introduction of a new connector type, namely the SN connector, is set to have a profound impact on 400G. The SN interface has already been adopted in transceiver specifications of QSFP-DD and OSFP. These transceivers are the new specifications for the next generation of pluggable transceivers for 200Gbps, 400Gbps, and 800Gbps data centre interconnects (DCI). The SN connector is a new, duplex optical fibre connector that uses LC-style 1.25mm O.D. Zirconia ferrules, designed for the next generation Hyperscale, Edge, Enterprise, or Colocation data centres. The SN connector provides superior optical performance while reducing the typical number of connection points in the optical path. The SN connector was designed to provide individual and independent duplex fibre breakout at a quad-style transceiver (QSFP, QSFP-DD & OSFP) that is more efficient, reliable, and scalable than the MPO connector. The SFP-DD has also adopted the SN as their independent duo-style interface, mainly for wireless front-haul applications. Beyond transceiver interfaces, SN increases and improves the fibre density and capacity for the existing fibre optic cassettes and patch panels. Compared to the LC connector, SN provides three times higher density. This will further support the implementation of more fibres without adding new rack units.

Fibre Optic Adaptors

The standard way of joining two fibres together at a patch interface is through the use of adaptors, sometimes also referred to as couplers. These devices consist of a plastic housing with precision alignment sleeves that are designed to ensure that the two fibre end faces are perfectly aligned when a fibre connector is inserted in to both sides of the adaptor. The adaptors are specific to the type of connector(s) to be mated. Some typical fibre adapters are shown to the right.

CS Adaptors

CS Connectors and Adaptors allows operators to increase the density of fibre-optic connections in data centre and networks.

The CS adaptors will allow you to fit many more connectors in a smaller space with a mechanism for sealing out contaminants and keeping your fibre lines clean and clear. The CS connectors deliver high data rates and small form factors to fit dense installations. The new CS connectors are so space-conscious that they may allow you to double the density of your patch panels."

The CS adaptors, which L-Com describes as retrofittable, are suited for cabling providers or equipment manufacturers that want to upgrade their existing systems to SN density without redesigning new panels or hardware. "Each adaptor will double the density of many existing SC/LC-based hardware and thus reduce the total cost per port of the overall system," Users can benefit from much-reduced rack consumption and improve their rack-unit revenue efficiency." Single-channel (2 fibres), dual-channel (4 fibres), and quad-channel (8 fibres) versions. These adaptors can upgrade fibre management hardware from SC/LC, improving rack-space utilization in data centres, making high-density centralized cross connects and patch panels, and combining different connector types in mixed fibre panels."

The CS adaptors have built-in, automatic shutters that prevent contamination. "With the help of a visible light source through the adaptor sleeve, these devices make traceability of the adaptor effortless," These adaptors are available in single-channel (2 fibres), dual-channel (4 fibres), triple-channel (6 fibres), and quad-channel (8 fibres) versions. They are often used in data centres, medical, wireless, quantum-computing, onboard optics, and fibre-to-the-home applications.

The CS is a very small form factor (VSFF) connector, designed for high-density data centre and OSFP/QSFP-DD breakout applications. It provides a 40% size reduction compared to the LC duplex connector, which enables users to double the density of patch panels, L-Com pointed out. "They offer more room for cable management as well as better airflow within the rack," the company added. The CS comes with a 2-mm or 3-mm boot and an integrated push-pull tab. It is UPC-polished, contains two ferrules in a single housing, and supports single mode fibre.

"We aim to help our customers improve their fibre-optic connectivity with our new SN and CS adaptors and connectors," commented L-Com product line manager Paul Hospodar. "These product lines enable higher-density installations without the need for more space or having to redesign panels or hardware."

Patch Cable Types Explained...

Single Mode OS2 Patch Cable

OS2 Patch Cables are made to provide bandwidth used in long distance transmission. They are 2.8mm Duplex Design with white strain relief boots and our standard LSOH jacket colour is Yellow. Each fibre cable is tested for insertion loss. Individual test results are provided.

10 Gigabit 50µm OM3 Patch Cable

OM3 Patch Cables are made to provide bandwidth that will support transmission above 10 Gigabits and can be used for applications up to 300 metres. They are 2.8mm Duplex Design with white strain relief boots and our standard LSOH jacket colour is Aqua Blue. Each fibre cable is tested for insertion loss. Individual test results are provided.

10 Gigabit 50µm OM4 Patch Cable

OM4 Patch Cables are made to provide bandwidth that will support transmission above 10 Gigabits and can be used for applications up to 550 metres. They are 2.8mm Duplex Design with white strain relief boots and our standard LSOH jacket colour is Aqua Blue or Erika Violet. Each fibre cable is tested for insertion loss. Individual test results are provided.

Ruggedised Patch Cable

All our Ruggedised are manufactured with individual fibre cable in a Flat Twin design with an additional overall LSOH jacket for added protection. Single mode OS2 has a Yellow LSOH jacket and Multimode OM3 and OM4 fibre with an Aqua Blue Jacket. Each fibre cable is tested for insertion loss. Individual test results are provided.

Uniboot LC Reverse Polarity Patch Cable

We can offer Uniboot LC Single and Multimode fibre patch cords offer a compact design and with a few simple steps the connector polarity can be reversed without any connector re-termination. Single mode OS2 has a Yellow LSOH jacket and Multimode OM3 and OM4 fibre with an Aqua Blue Jacket. Each fibre cable is tested for insertion loss. Individual test results are provided.

What is Return Loss?

When light hits the end of a fibre optic cable, a portion of it can bounce back towards the source. This is known as Back Reflection and it can cause a few different problems. Return Loss is the term for how much the end of a cable cuts down on Back Reflection.

You want as much Return Loss as possible.

What is Insertion Loss?

When light travels out of the port on your hardware into the fibre optic cable, some of it is lost in the transition. The amount that is lost is referred to as Insertion Loss.

You want as little Insertion Loss as possible

Testing and Certifying Fibre Optic Cable

It is relatively easy to certify fibre optic cable because it is immune to electrical interference. You only need to check a few measurements.

Attenuation. Measured in decibels/kilometre (dB/km), this is the decrease of signal strength as it travels through the fibre cable. Generally, attenuation problems are more common on multimode fibre optic cables.

Return loss. This is the amount of light reflected from the far end of the cable back to the source. The lower the number, the better. For example, a reading of -60 decibels is better than -20 decibels. Like attenuation, return loss is usually greater with multimode cable.

Graded refractive index. This measure how the light is sent down the fibre. This is commonly measured at wavelengths of 850 and 1300 nanometres. Compared to other operating frequencies, these two ranges yield the lowest intrinsic power loss. (NOTE: This is valid for multimode fibre only.)

Propagation delay. This is the time it takes a signal to travel from one point to another over a transmission channel.

Test Equipment

Optical time-domain reflectometry (OTDR). This enables you to isolate cable faults by transmitting high-frequency pulses onto a cable and examining their reflections along the cable. With OTDR, you can also determine the length of a fibre optic cable because the OTDR value includes the distance the optic signal travels.

Fibre Optic Light Sources and Meters. These fibre optic testers function by shining a light down one end of the cable and at the other end, there is a receiver calibrated to the strength of the light source. With this test, you can measure how much light is going to the other end of the cable. Generally, these testers give you the results in dB lost, which you then compare to the loss budget. If the measured loss is less than the number calculated by your loss budget, your installation is good.

Newer fibre optic testers have an even broader range of capabilities. They can test both 850- and 1300-nanometer signals at the same time and can even check your cable for compliance with specific standards.

MPO

MPO or MTP (multi-fibre termination push-on) terminated cables are widely used in high-density data centres. The terms MPO and MTP are often used however MPO is the recognised a fibre connector type, while MTP is a registered trademark of an MPO connector manufactured by US Conec. All MTPs are MPOs but not all MPOs are MTPs. To the naked eye, there is little difference between the two connectors, and in cabling and transceiver interfaces, they are compatible with each other.

MPO Design

MPO connectors are typically available with 8, 12, or 24 fibres with 32, 48, 60, or 72 fibres fibre counts available, but these are typically used for specialty super high-density multi-fibre arrays in large scale optical switches.

MPO connectors are either male (with alignment pins) or female (without alignment pins). In order to mate two MPO connectors together through an adapter, one connector must have pins and the other must be without pins. The role of the alignment pins is to ensure that fibres are facing each other perfectly, ensuring successful mating.

MPO connectors are often color-coded to help contractors distinguish between the different fibre types and polish specifications for single mode. MPO connectors are made for both single-mode and multimode multifibre cables. In single-mode OS2 applications, per Telecommunications Industry Association's (TIA) specification, the cable jacket is yellow. The connector colour will vary depending on the connector type. Ultra-Physical Contact (UPC) connectors will also be yellow, while Angled Physical Contact (APC) connectors are green. With multimode OM3/OM4, both MPO connectors and cable jacket will be aqua, per TIA specifications.

MPO Polarity

Achieving polarity is another challenge with MPOs. Polarity defines the direction of the light path or flow and is called the A-B-Cs of fibre polarity. This is more complex with multi-fibre MPO cables and connectors. Industry standard TIA-568.3-D names three different polarity methods for MPOs: Method A, Method B, and Method C. Each method uses different types of MPO cables.

When examining a typical 12 fibre configurations, Method A uses a key up connector on one end and a key down connector on the other end so that the fibre located in Position 1 arrives at Position 1 at the other end. Method B uses key up connectors on both ends to achieve the transceiver-receiver flip so that the fibre located in Position 1 arrives at Position 12 at the opposite end, the fibre located in Position 2 arrives at Position 11 at the opposite end, and so on. Method C uses a key up connector on one end and a key down on the other end like Method A, but the flip happens within the cable itself where each pair of fibres is flipped so that the fibre in Position 1 arrives at Position 2 at the opposite end, and the fibre in Position 2 arrives at Position 1.

Whichever Method is chosen, Polarity needs to be consistent.

TYPE A

TYPE B

TYPE C

MPO 8 Fibre, 12 Fibre and 24 Fibre

For density, 24-fibre cabling has an advantage over 12-fibre since the higher density in the enclosure leaves more rack space for active equipment, reducing the total amount of rack space required for patching. With 24-fibre, enclosures can have twice as many connections with the same number of ports compared to 12-fibre.

Also, 24-fibre cabling only needs half the number of cables with less pace needed and improved airflow and reduced cooling costs.

Ina 8-fibre, parallel optic applications. A Base8 or 8-fibre cabling infrastructure actually uses 12-fibre MPO connectors to achieve 40, 100, 200, or 400 Gb/s channels. In these cases, only 8 of the 12 fibres are used, so a third of the connector capacity is dark or unused. Using a 24-fibre cabling infrastructure, you can run three 8-fibre channels in one connector.

MPO CONNECTORS IN THE CHANNEL

8-Fibers

Grey Colour-Coded Boot

20-Fibers

24-Fibers

12-Fibers

Aqua Colour-Coded Boot

Red Colour-Coded Boot

New VSFF Fibre Connectors for next-gen 200/400G transceiver QSFP-DD and OSFP

These new connectors will offer a 40% size reduction compared to LC Duplex, with performance exceeds LC and Double the density in patch panel compared to LC. For example, it will be possible to have 256F in a 1U Fibre panel.

Space Saving 40%

33mm

4x CS Duplex Connector

54mm

CS 96F 1U Patch Panel   Space Saving

How Can you Master Polarity?

Following the release of the ANSI/TIA-568.3-E, Optical Fiber Cabling and Components Standard, users have seen the addition of two new connectivity (polarity) methods for array (MPO)-based duplex applications. The revision also introduced revised guidance on pinning of connectors to better support future transition to end-to-end array systems.

Prior to the release of this revision of the standard, connectivity methods for array-based duplex applications were limited to Methods A, B & C – each having its own strengths and weaknesses. ANSI/TIA-568.3-E introduced two new "universal" methods: U1 and U2. The advantage of these new methods is having the commonality components of Method B without the need for unique MTP-to-LC modules on each end. Customers can now use the same MPO-to-LC modules and duplex patch cords on either end of the channel in conjunction with a Type-B trunk – thus simplifying deployments.

Methods U1 and U2 both use Type-B array trunks and A-to-B duplex patch cords. Where they differ is Method U1 uses Type-A (Key-Up to Key-Down) array adapters and Type-U1 fiber transitions which Method U2 uses Type-B (Key-Up to Key-Up) array adapters and Type-U2 fiber transitions as show below in Table 1 and Figure 1:

Table 1: New Duplex Connectivity Methods

Connectivity Method	Array Trunk Cable	Array Adaptor	Fibre Transition	Duplex Patch Cord
U1	Type-B	Type-A	Type-U1	A-to-B
U2		Type-B	Type-U2	

Figure 1: Connectivity Method 1

ESG - Environmental, Social and Governance

Introducing our ESG Bulk Pack Product offering to help overcome environmental challenges associated with packaging

At Cablenet, an industry-leading computer and network cabling supplier, we have pledged to become more sustainable and eliminate as much packaging as possible, including single-use plastics and packaging of any type. This is in line with our goal to minimise packaging altogether.

At Cablenet, we have a phased approach to introducing ESG (environmental, social and governance) products that reduce packaging, beginning with introducing network patch leads and fibre leads. This demonstrates our dedication to making significant strides in promoting efficient packaging practices and encourages customers to support us on our ESG mission by buying these ESG products in bulk where possible. Customers will contribute to substantially reducing their packaging waste and decrease transportation-related emissions.

Managing Director Peter Pearson stated, *"Sustainability is no longer a choice; it is a necessity in business. At Cablenet, we understand the growing importance of environmental considerations. Our ESG products, rather than merely being part of the sales patter or "greenwashing" are a tangible action and commitment for customers seeking suppliers committed to sustainability benefits for their industries."*

Cablenet continuously adapts to industry needs while staying true to our core values. We believe it is our duty and corporate responsibility to minimise our industry's contribution to landfill sites.

The bulk packaging option is included in our portfolio of products. It is available through our website search option, so look for the ESG product logo and join us in our goal of a greener and more environmentally conscious future.

Custom Pre-Terminated Fibre Optic Cable Assemblies

- **Premium Quality Products**
- **Individually Tested**
- **Flexible Configurations**
- **Personalised Service**
- **Custom Labelling**
- **B2B Confidentiality**
- **Delivery (UK/EU)**

Fibre Optic Workshop Capabilities

Patch Cords

Cable Mode Standard	OM1, OM2, OM3, OM4, Singlemode
Fibre Cable Type	3.0mm, MiniZip, Flat Duplex or Round Duplex
Standard Connectors	ST, SC, LC, MU, E2000, LC Uniboot
APC Connectors	LC, FC, SC

Pre-Terminated Multicore Assemblies Tight Buffered

Cable Mode Standard	OM1, OM2, OM3, OM4, Singlemode
Fibre Cable Type	3.0mm, MiniZip, Flat Duplex or Round Duplex
Standard Connectors	ST, SC, LC, MU, E2000, LC Uniboot
APC Connectors	LC, FC, SC
Cores	4 - 24 Core

Custom Options Available

Assembly	Uniboot, MPO Assemblies, MPO Fan Outs, Ruggedised & Armoured, OM5
Cable Mode Standard	OM1, OM2, OM3, OM4, Singlemode
Fibre Cable Type	3.0mm, MiniZip, Flat Duplex or Round Duplex
Standard Connectors	ST, SC, LC, MU, E2000, LC Uniboot
Cores	4 - 24 Core, 48 Core with LC only

Mini Breakout Assemblies for Direct to Equipment

Cable Mode Standard	OM3, Singlemode
Standard Connectors	SC, LC
APC Connectors	SC, LC

Standard Colours
(other colours available on request)

	Singlemode	OM1	OM2	OM3	OM4
3.0mm Cable	Yellow	Green, Grey, Yellow	Orange, Black, Red, Yellow	Orange, Aqua, Grey, Green	Magenta, Red, Blue
Mini Zip 2.0mm	Yellow	Grey	Orange	Orange	
Flat Duplex Ruggedised	Yellow	Grey	Orange	Orange, Aqua	Magenta, Aqua

Yellow • Green • Grey • Orange • Black • Red • Aqua • Magenta • Blue

Fibre Networking

PART NO	DESCRIPTION
Fibre Optic Pigtails	
OS2 Pigtails	
9FC1	1m OS2 9/125 FC Yellow Fibre Pigtail 900um
9LC1	1m OS2 9/125 LC Yellow Fibre Pigtail 900um
9LC1-12	1m OS2 9/125 LC Pigtail Yellow Fibre Pigtail 900um (PK 12)
9ST1	1m OS2 9/125 ST Yellow Fibre Pigtail 900um
9SC1	1m OS2 9/125 SC Yellow Fibre Pigtail 900um
9APCFC1	1m OS2 9/125 FC/APC Yellow Fibre Pigtail 900um
9APCLC1	1m OS2 9/125 LC/APC Yellow Fibre Pigtail 900um
OM4 Pigtails	
4LC1	1m OM4 50/125 LC Aqua Fibre Pigtail 900um
4SC1	1m OM4 50/125 SC Aqua Fibre Pigtail 900um
EV4LC1	1m OM4 50/125 LC Violet Fibre Pigtail 900um
OM3 Pigtails	
3LC1	1m OM3 50/125 LC Aqua Fibre Pigtail 900um
3SC1	1m OM3 50/125 SC Aqua Fibre Pigtail 900um
3ST1	1m OM3 50/125 ST Aqua Fibre Pigtail 900um

Fibre Optic Patch Leads

OS2 3.00mm Fibre Leads   YELLOW

PART NO	DESCRIPTION
OS2 - FC to FC LSOH	
9FCFC1	1m OS2 9/125 FC-FC Duplex Yellow LSOH Fibre Patch Lead
9FCFC2	2m OS2 9/125 FC-FC Duplex Yellow LSOH Fibre Patch Lead
9FCFC3	3m OS2 9/125 FC-FC Duplex Yellow LSOH Fibre Patch Lead
9FCFC5	5m OS2 9/125 FC-FC Duplex Yellow LSOH Fibre Patch Lead
9FCFC10	10m OS2 9/125 FC-FC Duplex Yellow LSOH Fibre Patch Lead

PART NO	DESCRIPTION
OS2 - FC to LC LSOH	
9FCLC1	1m OS2 9/125 FC-LC Duplex Yellow LSOH Fibre Patch Lead
9FCLC2	2m OS2 9/125 FC-LC Duplex Yellow LSOH Fibre Patch Lead
9FCLC3	3m OS2 9/125 FC-LC Duplex Yellow LSOH Fibre Patch Lead
9FCLC5	5m OS2 9/125 FC-LC Duplex Yellow LSOH Fibre Patch Lead
9FCLC10	10m OS2 9/125 FC-LC Duplex Yellow LSOH Fibre Patch Lead
OS2 - FC to SC LSOH	
9FCSC1	1m OS2 9/125 FC-SC Duplex Yellow LSOH Fibre Patch Lead
9FCSC2	2m OS2 9/125 FC-SC Duplex Yellow LSOH Fibre Patch Lead
9FCSC5	5m OS2 9/125 FC-SC Duplex Yellow LSOH Fibre Patch Lead
OS2 - FC to ST LSOH	
9FCST1	1m OS2 9/125 FC-ST Duplex Yellow LSOH Fibre Patch Lead
9FCST2	2m OS2 9/125 FC-ST Duplex Yellow LSOH Fibre Patch Lead
9FCST3	3m OS2 9/125 FC-ST Duplex Yellow LSOH Fibre Patch Lead
9FCST5	5m OS2 9/125 FC-ST Duplex Yellow LSOH Fibre Patch Lead
9FCST10	10m OS2 9/125 FC-ST Duplex Yellow LSOH Fibre Patch Lead
OS2 - LC to LC LSOH	
9LCLC03	0.3m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC05	0.5m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC05-12	0.5m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead (PK 12)
9LCLC1	1m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC1-12	1m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead (PK 12)
9LCLC1.5	1.5m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC2	2m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC2-12	2m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead (PK 12)
9LCLC2.5	2.5m OS2 9/125 LC UPC - LC UPC Duplex Yellow LSOH Fibre Patch Lead
9LCLC3	3m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC3-12	3m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead (PK 12)

ESG PRODUCT

Fibre Optic Patch Leads
Fibre Networking

PART NO	DESCRIPTION
Fibre Optic Patch Leads >	**OS2 3.00mm Fibre Leads YELLOW**
9LCLC4	4m OS2 9/125 LC UPC - LC UPC Duplex Yellow LSOH Fibre Patch Lead
9LCLC5	5m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC5-12	5m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead (PK 12)
9LCLC6	6m OS2 9/125 LC UPC - LC UPC Duplex Yellow LSOH Fibre Patch Lead
9LCLC7	7m OS2 9/125 LC UPC - LC UPC Duplex Yellow LSOH Fibre Patch Lead
9LCLC8	8m OS2 9/125 LC UPC - LC UPC Duplex Yellow LSOH Fibre Patch Lead
9LCLC10	10m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC10B	10m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead (PK 5)
9LCLC15	15m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC20	20m OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
9LCLC25	25m OS2 9/125 LC UPC - LC UPC Duplex Yellow LSOH Fibre Patch Lead
9LCLC30	30m OS2 9/125 LC UPC - LC UPC Duplex Yellow LSOH Fibre Patch Lead
OS2 - LC to SC LSOH	
9LCSC05	0.5m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC1	1m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC1.5	1.5m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC2	2m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC3	3m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC4	4m OS2 9/125 LC UPC - SC UPC Duplex Yellow LSOH Fibre Patch Lead
9LCSC5	5m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC10	10m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC15	15m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC20	20m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
9LCSC30	30m OS2 9/125 LC-SC Duplex Yellow LSOH Fibre Patch Lead
OS2 - LC to ST LSOH	
9LCST05	0.5m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
9LCST1	1m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
9LCST2	2m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
9LCST3	3m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
9LCST3-12	3m OS2 9/125 LC UPC - ST UPC Duplex Yellow LSOH Fibre Patch Lead (PK 12)
9LCST5	5m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
9LCST10	10m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
9LCST15	15m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
9LCST20	20m OS2 9/125 LC-ST Duplex Yellow LSOH Fibre Patch Lead
OS2 - SC to SC LSOH	
9SCSC05	0.5m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
9SCSC1	1m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead

PART NO	DESCRIPTION
9SCSC2	2m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
9SCSC3	3m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
9SCSC5	5m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
9SCSC10	10m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
9SCSC15	15m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
9SCSC20	20m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
9SCSC30	30m OS2 9/125 SC-SC Duplex Yellow LSOH Fibre Patch Lead
OS2 - ST to SC LSOH	
9STSC05	0.5m OS2 9/125 ST-SC Duplex Yellow LSOH Fibre Patch Lead
9STSC1	1m OS2 9/125 ST-SC Duplex Yellow LSOH Fibre Patch Lead
9STSC2	2m OS2 9/125 ST-SC Duplex Yellow LSOH Fibre Patch Lead
9STSC3	3m OS2 9/125 ST-SC Duplex Yellow LSOH Fibre Patch Lead
9STSC5	5m OS2 9/125 ST-SC Duplex Yellow LSOH Fibre Patch Lead
9STSC10	10m OS2 9/125 ST-SC Duplex Yellow LSOH Fibre Patch Lead
OS2 - ST to ST LSOH	
9STST1	1m OS2 9/125 ST-ST Duplex Yellow LSOH Fibre Patch Lead
9STST2	2m OS2 9/125 ST-ST Duplex Yellow LSOH Fibre Patch Lead
9STST3	3m OS2 9/125 ST-ST Duplex Yellow LSOH Fibre Patch Lead
9STST5	5m OS2 9/125 ST-ST Duplex Yellow LSOH Fibre Patch Lead
9STST10	10m OS2 9/125 ST-ST Duplex Yellow LSOH Fibre Patch Lead
OM5 3.00mm Fibre Leads LIME GREEN	
OM5 - LC to LC LSOH	
5LCLC05	0.5m OM5 50/125 LC-LC Duplex Lime Green LSOH Fibre Patch Lead
5LCLC1	1m OM5 50/125 LC-LC Duplex Lime Green LSOH Fibre Patch Lead
5LCLC2	2m OM5 50/125 LC-LC Duplex Lime Green LSOH Fibre Patch Lead
5LCLC3	3m OM5 50/125 LC-LC Duplex Lime Green LSOH Fibre Patch Lead
5LCLC5	5m OM5 50/125 LC-LC Duplex Lime Green LSOH Fibre Patch Lead
OM4 3.00mm Fibre Leads AQUA	
OM4 - LC to LC LSOH	
4LCLC05	0.5m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC05-12	0.5m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
4LCLC1	1m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC1-12	1m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
4LCLC1.5	1.5m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC2	2m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC2-12	2m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
4LCLC2.5	2.5m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead

ESG PRODUCT

Fibre Networking

Fibre Optic Patch Leads

PART NO	DESCRIPTION

Fibre Optic Patch Leads > **OM4 3.00mm Fibre Leads AQUA**

PART NO	DESCRIPTION
4LCLC3	3m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC3-12	3m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
4LCLC4	4m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC5	5m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC5-12	5m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
4LCLC6	6m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC7	7m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC8	8m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC10	10m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC10B	10m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 5)
4LCLC15	15m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC20	20m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC25	25m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC30	30m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
4LCLC50	50m OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead

OM4 - LC to SC LSOH

PART NO	DESCRIPTION
4LCSC05	0.5m OM4 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
4LCSC1	1m OM4 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
4LCSC2	2m OM4 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
4LCSC3	3m OM4 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
4LCSC4	4m OM4 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
4LCSC5	5m OM4 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
4LCSC10	10m OM4 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead

OM4 - LC to ST LSOH

PART NO	DESCRIPTION
4LCST05	0.5m OM4 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
4LCST1	1m OM4 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
4LCST2	2m OM4 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
4LCST3	3m OM4 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
4LCST5	5m OM4 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
4LCST10	10m OM4 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead

OM4 - SC to SC LSOH

PART NO	DESCRIPTION
4SCSC05	0.5m OM4 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
4SCSC1	1m OM4 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
4SCSC2	2m OM4 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
4SCSC3	3m OM4 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
4SCSC5	5m OM4 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
4SCSC10	10m OM4 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead

OM4 3.00mm Fibre Leads VIOLET

OM4 - LC to LC LSOH

PART NO	DESCRIPTION
EV4LCLC05	0.5m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
EV4LCLC1	1m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
EV4LCLC1.5	1.5m OM4 50/125 LC-LC Duplex Erika Violet LSOH Fibre Patch Lead
EV4LCLC2	2m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
EV4LCLC2-12	2m OM4 50/125 LC-LC Duplex Erika Violet LSOH Fibre Patch Lead (PK 12)
EV4LCLC3	3m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
EV4LCLC5	5m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
EV4LCLC10	10m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
EV4LCLC15	15m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
EV4LCLC20	20m OM4 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead

OM4 - LC to SC LSOH

PART NO	DESCRIPTION
EV4LCSC1	1m OM4 50/125 LC-SC Duplex Erika Violet LSOH Fibre Patch Lead
EV4LCSC2	2m OM4 50/125 LC-SC Duplex Erika Violet LSOH Fibre Patch Lead
EV4LCSC3	3m OM4 50/125 LC-SC Duplex Erika Violet LSOH Fibre Patch Lead

OM4 - ST to SC LSOH

PART NO	DESCRIPTION
EV4STSC1	1m OM4 50/125 ST-SC Duplex Erika Violet LSOH Fibre Patch Lead
EV4STSC2	2m OM4 50/125 ST-SC Duplex Erika Violet LSOH Fibre Patch Lead
EV4STSC3	3m OM4 50/125 ST-SC Duplex Erika Violet LSOH Fibre Patch Lead

OM4 - LC to ST LSOH

PART NO	DESCRIPTION
EV4LCST1	1m OM4 50/125 LC-ST Duplex Erika Violet LSOH Fibre Patch Lead
EV4LCST2	2m OM4 50/125 LC-ST Duplex Erika Violet LSOH Fibre Patch Lead
EV4LCST3	3m OM4 50/125 LC-ST Duplex Erika Violet LSOH Fibre Patch Lead
EV4LCST5	5m OM4 50/125 LC-ST Duplex Erika Violet LSOH Fibre Patch Lead

OM4 3.00mm Fibre Leads ORANGE

OM4 - LC to LC LSOH

PART NO	DESCRIPTION
OR4LCLC1	1m OM4 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR4LCLC1.5	1.5m OM4 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR4LCLC2	2m OM4 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR4LCLC3	3m OM4 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead

OM3 3.00mm Fibre Leads AQUA

OM3 - LC to LC LSOH

PART NO	DESCRIPTION
3LCLC03	0.3m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC05	0.5m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC05-12	0.5m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
3LCLC1	1m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead

ESG PRODUCT

ESG PRODUCT

CABLENET

Tel. 01276 405300   **Email.** sales@cablenet.co.uk   **Web.** www.cablenet.co.uk

Fibre Optic Patch Leads

Fibre Networking

PART NO	DESCRIPTION
Fibre Optic Patch Leads >	**OM3 3.00mm Fibre Leads AQUA**
3LCLC1-12	1m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
3LCLC1.5	1.5m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC2	2m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC2-12	2m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
3LCLC2.5	2.5m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC3	3m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC3-12	3m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead (PK 12)
3LCLC3.5	3.5m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC4	4m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC5	5m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC6	6m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC7	7m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC8	8m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC10	10m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC15	15m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC20	20m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC25	25m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC30	30m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
3LCLC40	40m OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead

OM3 - LC to SC LSOH

PART NO	DESCRIPTION
3LCSC05	0.5m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC1	1m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC2	2m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC3	3m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC5	5m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC10	10m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC15	15m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC20	20m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead
3LCSC30	30m OM3 50/125 LC-SC Duplex Aqua LSOH Fibre Patch Lead

OM3 - LC to ST LSOH

PART NO	DESCRIPTION
3LCST05	0.5m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
3LCST1	1m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
3LCST2	2m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
3LCST3	3m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
3LCST5	5m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
3LCST10	10m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
3LCST15	15m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead
3LCST20	20m OM3 50/125 LC-ST Duplex Aqua LSOH Fibre Patch Lead

OM3 - SC to SC LSOH

PART NO	DESCRIPTION
3SCSC05	0.5m OM3 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
3SCSC1	1m OM3 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
3SCSC2	2m OM3 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
3SCSC3	3m OM3 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
3SCSC5	5m OM3 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead
3SCSC10	10m OM3 50/125 SC-SC Duplex Aqua LSOH Fibre Patch Lead

OM3 - ST to SC LSOH

PART NO	DESCRIPTION
3STSC1	1m OM3 50/125 ST-SC Duplex Aqua LSOH Fibre Patch Lead
3STSC2	2m OM3 50/125 ST-SC Duplex Aqua LSOH Fibre Patch Lead
3STSC3	3m OM3 50/125 ST-SC Duplex Aqua LSOH Fibre Patch Lead
3STSC5	5m OM3 50/125 ST-SC Duplex Aqua LSOH Fibre Patch Lead
3STSC10	10m OM3 50/125 ST-SC Duplex Aqua LSOH Fibre Patch Lead

OM3 - ST to ST LSOH

PART NO	DESCRIPTION
3STST1	1m OM3 50/125 ST-ST Duplex Aqua LSOH Fibre Patch Lead
3STST2	2m OM3 50/125 ST-ST Duplex Aqua LSOH Fibre Patch Lead
3STST3	3m OM3 50/125 ST-ST Duplex Aqua LSOH Fibre Patch Lead
3STST5	5m OM3 50/125 ST-ST Duplex Aqua LSOH Fibre Patch Lead
3STST10	10m OM3 50/125 ST-ST Duplex Aqua LSOH Fibre Patch Lead

OM3 3.00mm Fibre Leads   ORANGE

OM3 - LC to LC LSOH

PART NO	DESCRIPTION
OR3LCLC05	0.5m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC1	1m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC1.5	1.5m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC2	2m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC2.5	2.5m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC3	3m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC4	4m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC5	5m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC10	10m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
OR3LCLC15	15m OM3 50/125 LC-LC Duplex Orange LSOH Fibre Patch Lead

OM3 - LC to SC LSOH

PART NO	DESCRIPTION
OR3LCSC05	0.5m OM3 50/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
OR3LCSC1	1m OM3 50/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
OR3LCSC2	2m OM3 50/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
OR3LCSC3	3m OM3 50/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
OR3LCSC5	5m OM3 50/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
OR3LCSC10	10m OM3 50/125 LC-SC Duplex Orange LSOH Fibre Patch Lead

ESG PRODUCT

Fibre Networking

Fibre Optic Patch Leads

PART NO	DESCRIPTION

Fibre Optic Patch Leads > OM3 3.00mm Fibre Leads   ORANGE

OM3 - LC to ST LSOH

OR3LCST05	0.5m OM3 50/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
OR3LCST1	1m OM3 50/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
OR3LCST2	2m OM3 50/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
OR3LCST3	3m OM3 50/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
OR3LCST5	5m OM3 50/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
OR3LCST10	10m OM3 50/125 LC-ST Duplex Orange LSOH Fibre Patch Lead

OM3 - SC to SC LSOH

OR3SCSC1	1m OM3 50/125 SC-SC Duplex Orange LSOH Fibre Patch Lead
OR3SCSC2	2m OM3 50/125 SC-SC Duplex Orange LSOH Fibre Patch Lead
OR3SCSC3	3m OM3 50/125 SC-SC Duplex Orange LSOH Fibre Patch Lead
OR3SCSC5	5m OM3 50/125 SC-SC Duplex Orange LSOH Fibre Patch Lead
OR3SCSC10	10m OM3 50/125 SC-SC Duplex Orange LSOH Fibre Patch Lead

OM3 - ST to SC LSOH

OR3STSC05	0.5m OM3 50/125 ST-SC Duplex Orange LSOH Fibre Patch Lead
OR3STSC1	1m OM3 50/125 ST-SC Duplex Orange LSOH Fibre Patch Lead
OR3STSC2	2m OM3 50/125 ST-SC Duplex Orange LSOH Fibre Patch Lead
OR3STSC3	3m OM3 50/125 ST-SC Duplex Orange LSOH Fibre Patch Lead
OR3STSC5	5m OM3 50/125 ST-SC Duplex Orange LSOH Fibre Patch Lead
OR3STSC10	10m OM3 50/125 ST-SC Duplex Orange LSOH Fibre Patch Lead

OM3 - ST to ST LSOH

OR3STST05	0.5m OM3 50/125 ST-ST Duplex Orange LSOH Fibre Patch Lead
OR3STST1	1m OM3 50/125 ST-ST Duplex Orange LSOH Fibre Patch Lead
OR3STST2	2m OM3 50/125 ST-ST Duplex Orange LSOH Fibre Patch Lead
OR3STST3	3m OM3 50/125 ST-ST Duplex Orange LSOH Fibre Patch Lead
OR3STST5	5m OM3 50/125 ST-ST Duplex Orange LSOH Fibre Patch Lead
OR3STST10	10m OM3 50/125 ST-ST Duplex Orange LSOH Fibre Patch Lead

OM3 3.00mm Fibre Leads   RED

OM3 - LC to LC LSOH

RE3LCLC3	3m OM3 50/125 LC-LC Duplex Red LSOH Fibre Patch Lead
RE4LCLC5	5m OM4 50/125 LC-LC Duplex Red LSOH Fibre Patch Lead

OM2 Fibre Leads available on request
Please contact our sales team for more details.

PART NO	DESCRIPTION

OM3 3.00mm Fibre Leads   VIOLET

OM3 - LC to LC LSOH

VT3LCLC05	0.5m OM3 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
VT3LCLC1	1m OM3 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
VT3LCLC2	2m OM3 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
VT3LCLC3	3m OM3 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
VT3LCLC5	5m OM3 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead
VT3LCLC10	10m OM3 50/125 LC-LC Duplex Violet LSOH Fibre Patch Lead

OM3 - LC to SC LSOH

VT3LCSC1	1m OM3 50/125 LC-SC Duplex Violet LSOH Fibre Patch Lead
VT3LCSC1.5	1.5m OM3 50/125 LC-SC Duplex Violet LSOH Fibre Patch Lead
VT3LCSC2	2m OM3 50/125 LC-SC Duplex Violet LSOH Fibre Patch Lead
VT3LCSC3	3m OM3 50/125 LC-SC Duplex Violet LSOH Fibre Patch Lead
VT3LCSC5	5m OM3 50/125 LC-SC Duplex Violet LSOH Fibre Patch Lead
VT3LCSC15	15m OM3 50/125 LC-SC Duplex Violet LSOH Fibre Patch Lead
VT3LCSC20	20m OM3 50/125 LC-SC Duplex Violet LSOH Fibre Patch Lead

OM3 - LC to ST LSOH

VT3LCST2	2m OM3 50/125 LC-ST Duplex Violet LSOH Fibre Patch Lead
VT3LCST3	3m OM3 50/125 LC-ST Duplex Violet LSOH Fibre Patch Lead
VT3LCST5	5m OM3 50/125 LC-ST Duplex Violet LSOH Fibre Patch Lead
VT3LCST10	10m OM3 50/125 LC-ST Duplex Violet LSOH Fibre Patch Lead

OM3 - SC to SC LSOH

VT3SCSC05	0.5m OM3 50/125 SC-SC Duplex Violet LSOH Fibre Patch Lead
VT3SCSC1	1m OM3 50/125 SC-SC Duplex Violet LSOH Fibre Patch Lead
VT3SCSC3	3m OM3 50/125 SC-SC Duplex Violet LSOH Fibre Patch Lead
VT3SCSC5	5m OM3 50/125 SC-SC Duplex Violet LSOH Fibre Patch Lead
VT3SCSC15	15m OM3 50/125 SC-SC Duplex Violet LSOH Fibre Patch Lead
VT3SCSC20	20m OM3 50/125 SC-SC Duplex Violet LSOH Fibre Patch Lead
VT3SCSC25	25m OM3 50/125 SC-SC Duplex Violet LSOH Fibre Patch Lead

OM3 - ST to SC LSOH

VT3STSC2	2m OM3 50/125 ST-SC Duplex Violet LSOH Fibre Patch Lead
VT3STSC3	3m OM3 50/125 ST-SC Duplex Violet LSOH Fibre Patch Lead
VT3STSC5	5m OM3 50/125 ST-SC Duplex Violet LSOH Fibre Patch Lead
VT3STSC15	15m OM3 50/125 ST-SC Duplex Violet LSOH Fibre Patch Lead
VT3STSC20	20m OM3 50/125 ST-SC Duplex Violet LSOH Fibre Patch Lead

PART NO	DESCRIPTION
OM1 3.00mm Fibre Leads ORANGE	

OM1 - LC to LC LSOH

62LCLC05	0.5m OM1 62.5/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
62LCLC1	1m OM1 62.5/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
62LCLC2	2m OM1 62.5/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
62LCLC3	3m OM1 62.5/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
62LCLC5	5m OM1 62.5/125 LC-LC Duplex Orange LSOH Fibre Patch Lead
62LCLC10	10m OM1 62.5/125 LC-LC Duplex Orange LSOH Fibre Patch Lead

OM1 - LC to SC LSOH

62LCSC05	0.5m OM1 62.5/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
62LCSC1	1m OM1 62.5/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
62LCSC2	2m OM1 62.5/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
62LCSC3	3m OM1 62.5/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
62LCSC5	5m OM1 62.5/125 LC-SC Duplex Orange LSOH Fibre Patch Lead
62LCSC10	10m OM1 62.5/125 LC-SC Duplex Orange LSOH Fibre Patch Lead

OM1 - LC to ST LSOH

62LCST05	0.5m OM1 62.5/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
62LCST1	1m OM1 62.5/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
62LCST2	2m OM1 62.5/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
62LCST3	3m OM1 62.5/125 LC-ST Duplex Orange LSOH Fibre Patch Lead
62LCST5	5m OM1 62.5/125 LC-ST Duplex Orange LSOH Fibre Patch Lead

OM1 - SC to SC LSOH

62SCSC1	1m OM1 62.5/125 SC-SC Duplex Orange LSOH Fibre Patch Lead
62SCSC2	2m OM1 62.5/125 SC-SC Duplex Orange LSOH Fibre Patch Lead
62SCSC3	3m OM1 62.5/125 SC-SC Duplex Orange LSOH Fibre Patch Lead
62SCSC10	10m OM1 62.5/125 SC-SC Duplex Orange LSOH Fibre Patch Lead

OM1 - ST to SC LSOH

62STSC1	1m OM1 62.5/125 ST-SC Duplex Orange LSOH Fibre Patch Lead
62STSC2	2m OM1 62.5/125 ST-SC Duplex Orange LSOH Fibre Patch Lead
62STSC3	3m OM1 62.5/125 ST-SC Duplex Orange LSOH Fibre Patch Lead

OM1 - ST to ST LSOH

62STST1	1m OM1 62.5/125 ST-ST Duplex Orange LSOH Fibre Patch Lead
62STST2	2m OM1 62.5/125 ST-ST Duplex Orange LSOH Fibre Patch Lead
62STST3	3m OM1 62.5/125 ST-ST Duplex Orange LSOH Fibre Patch Lead

See our Fibre Workshop cable options on Page 69

PART NO	DESCRIPTION
OM3 1.8mm MINIZIP Leads AQUA	

OM3 - LC to LC LSOH

MZ3LCLC05	0.5m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC1	1m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC1.5	1.5m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC2	2m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC3	3m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC4	4m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC5	5m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC10	10m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC15	15m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC20	20m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCLC30	30m OM3 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead

OM3 - LC to SC LSOH

MZ3LCSC05	0.5m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC1	1m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC2	2m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC3	3m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC5	5m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC10	10m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC15	15m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC20	20m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ3LCSC30	30m OM3 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead

OM4 1.8mm MINIZIP Leads AQUA	

OM4 - LC to LC LSOH

MZ4LCLC05	0.5m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC1	1m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC1.5	1.5m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC2	2m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC3	3m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC4	4m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC5	5m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC10	10m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC15	15m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC20	20m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCLC30	30m OM4 50/125 LC-LC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead

Minizip Fibre Optic Patch Leads | Uniboots (Reverse Polarity)

PART NO	DESCRIPTION

Fibre Optic Patch Leads > **OM4 1.8mm MINIZIP Leads   AQUA**

OM4 - LC to SC LSOH

MZ4LCSC05	0.5m OM4 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCSC1	1m OM4 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCSC2	2m OM4 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCSC3	3m OM4 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCSC10	10m OM4 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCSC15	15m OM4 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead
MZ4LCSC20	20m OM4 50/125 LC-SC Duplex Aqua LSOH 1.8mm Minizip Fibre Patch Lead

OS2 1.8mm MINIZIP Leads   YELLOW

OS2 - LC to LC LSOH

MZ9LCLC05	0.5m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC075	0.75m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC1	1m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC1.5	1.5m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC2	2m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC3	3m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC5	5m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC10	10m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC15	15m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC20	20m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCLC30	30m OS2 9/125 LC-LC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead

OS2 - LC to SC LSOH

MZ9LCSC05	0.5m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCSC1	1m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCSC2	2m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCSC3	3m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCSC5	5m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCSC10	10m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCSC15	15m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9LCSC30	30m OS2 9/125 LC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead

PART NO	DESCRIPTION

OS2 - SC to SC LSOH

MZ9SCSC05	0.5m OS2 9/125 SC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9SCSC1	1m OS2 9/125 SC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9SCSC2	2m OS2 9/125 SC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9SCSC3	3m OS2 9/125 SC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9SCSC5	5m OS2 9/125 SC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9SCSC7	7m OS2 9/125 SC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead
MZ9SCSC10	10m OS2 9/125 SC-SC Duplex Yellow LSOH 1.8mm Minizip Fibre Patch Lead

Uniboots (Reverse Polarity)

Uniboot (reverse polarity) LC Duplex Patch Leads

OM3 - LC to LC LSOH

UNI3LCLC1	1m Uniboot OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
UNI3LCLC1.5	1.5m Uniboot OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
UNI3LCLC2	2m Uniboot OM3 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead

OM4 - LC to LC LSOH

UNI4LCLC0.5	0.5m Uniboot OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
UNI4LCLC1	1m Uniboot OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
UNI4LCLC1.5	1.5m Uniboot OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
UNI4LCLC2	2m Uniboot OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead
UNI4LCLC3	3m Uniboot OM4 50/125 LC-LC Duplex Aqua LSOH Fibre Patch Lead

OS2 - LC to LC LSOH

UNI9LCLC05	0.5m Uniboot OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
UNI9LCLC1	1m Uniboot OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
UNI9LCLC1.5	1.5m Uniboot OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
UNI9LCLC2	2m Uniboot OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead
UNI9LCLC3	3m Uniboot OS2 9/125 LC-LC Duplex Yellow LSOH Fibre Patch Lead

Other lengths are available. Please contact our sales team for more details.

We also offer APC Single Mode Assemblies

PART NO	DESCRIPTION

MPO CPR Breakout Cable

OM4 MPO CPR Breakout Cable   AQUA

MPO-12B04LC1	1m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12B04LC2	2m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12B04LC3	3m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12B04LC5	5m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12B04LC10	10m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-8B04LC5	5m OM4 BASE-8 MPO (f) to 4X LC(DX) Breakout Aqua CPR Cable Method B
MPO-16B04LC5	5m OM4 BASE-16 MPO (f) to 8X LC(DX) Breakout Aqua CPR Cable Method B
MPO-24B04LC5	5m OM4 BASE-24 MPO (f) to 12X LC(DX) Breakout Aqua CPR Cable Method B

OS2 MPO CPR Breakout Cable   YELLOW

MPO-12B09LC1	1m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12B09LC2	2m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12B09LC3	3m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12B09LC5	5m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12B09LC10	10m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-8B09LC5	5m OS2 BASE-8 MPO (f) to 4X LC(DX) Breakout Yellow CPR Cable Method B
MPO-16B09LC5	5m OS2 BASE-16 MPO (f) to 8X LC(DX) Breakout Yellow CPR Cable Method B
MPO-24B09LC5	5m OS2 BASE-24 MPO(f) to 12X LC(DX) Breakout Yellow CPR Cable Method B

MPO CPR Trunk Cable

OM4 MPO CPR Trunk Cable   AQUA

MPO-12TC4MP01	1m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MP02	2m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MP03	3m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MP05	5m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MP010	10m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B

OM4 MPO CPR Trunk Cable   ERIKA VIOLET

MPO-12TC4MP01EV	1m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MP02EV	2m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MP03EV	3m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MP05EV	5m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MP010EV	10m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MP015EV	15m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B

PART NO	DESCRIPTION

OM4 MPO CPR Trunk Cable   AQUA

MPO-8TC4MP05	5m OM4 BASE-8 MPO (f) to MPO (f) 12F Aqua Trunk CPR Cable Method B
MPO-16TC4MP05	5m OM4 BASE-16 MPO (f) to MPO (f) 16F Aqua Trunk CPR Cable Method B
MPO-24TC4MP05	5m OM4 BASE-24 MPO(f) to MPO(f) 24F Aqua Trunk CPR Cable Method B

OS2 MPO CPR Trunk Cable   YELLOW

MPO-12TC9MP01	1m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MP02	2m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MP03	3m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MP05	5m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MP010	10m OS2 MPO (F) - MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-8TC9MP05	5m OS2 BASE-8 MPO (f) to MPO (f) 12F Yellow Trunk CPR Cable Method B
MPO-16TC9MP05	5m OS2 BASE-16 MPO (f) to MPO (f) 16F Yellow Trunk CPR Cable Method B
MPO-24TC9MP05	5m OS2 BASE-24 MPO(f)to MPO(f) 24F Yellow Trunk CPR Cable Method B

MTP CPR Breakout Cable

OM4 MTP CPR Breakout Cable   AQUA

MTP-12B04LC1	1m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12B04LC2	2m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12B04LC3	3m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12B04LC5	5m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12B04LC10	10m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-8B04LC5	5m OM4 BASE-8 MTP (f) to 4X LC(DX) Breakout Aqua CPR Cable Method B
MTP-16B04LC5	5m OM4 BASE-16 MTP (f) to 8X LC(DX) Breakout Aqua CPR Cable Method B
MTP-24B04LC5	5m OM4 BASE-24 MTP(f) to 12X LC(DX) Breakout Aqua CPR Cable Method B

OS2 MTP CPR Breakout Cable   YELLOW

MTP-12B09LC1	1m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12B09LC2	2m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12B09LC3	3m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12B09LC5	5m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12B09LC10	10m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-8B09LC5	5m OS2 BASE-8 MTP (f) to 4X LC(DX) Breakout Yellow CPR Cable Method B
MTP-16B09LC5	5m OS2 BASE-16 MTP (f) to 8X LC(DX) Breakout Yellow CPR Cable Method B
MTP-24B09LC5	5m OS2 BASE-24 MTP(f) to 12X LC(DX) Breakout Yellow CPR Cable Method B

Fibre Networking

MTP CPR Trunk Cable | MPO Breakout Cable | MPO Trunk Cable

PART NO	DESCRIPTION

MTP CPR Trunk Cable

OM4 MTP CPR Trunk Cable `AQUA`

MTP-12TC4MTP1	1m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP2	2m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP3	3m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP5	5m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP10	10m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-8TC4MTP5	5m OM4 BASE-8 MTP (f) to MTP (f) 12F Aqua CPR Trunk Cable Method B
MTP-16TC4MTP5	5m OM4 BASE-16 MTP (f) to MTP (f) 16F Aqua CPR Trunk Cable Method B
MTP-24TC4MTP5	5m OM4 BASE-24 MTP (f) to MTP (f) 24F Aqua CPR Trunk Cable Method B

OS2 MTP CPR Trunk Cable `YELLOW`

MTP-12TC9MTP1	1m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP2	2m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP3	3m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP5	5m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP10	10m OS2 MTP (F) - MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-8TC9MTP5	5m OS2 BASE-8 MTP (f) to MTP (f) 12F Yellow CPR Trunk Cable Method B
MTP-16TC9MTP5	5m OS2 BASE-16 MTP (f) to MTP (f) 16F Yellow CPR Trunk Cable Method B
MTP-24TC9MTP5	5m OS2 BASE-24 MTP (f) to MTP (f) 24F Yellow CPR Trunk Cable Method B

MPO Breakout Cable

OM3 MPO Breakout Cable `AQUA`

MPO-F-4LCDX-OM3-01M	1m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-02M	2m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-03M	3m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-05M	5m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-10M	10m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-20M	20m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B

OM4 MPO Breakout Cable `AQUA`

MPO-F-4LCDX-OM4-01M	1m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-02M	2m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-03M	3m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-05M	5m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-10M	10m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-20M	20m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B

PART NO	DESCRIPTION

OS2 MPO Breakout Cable `YELLOW`

MPO-F-4LCDX-OS2-01M	1m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-02M	2m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-03M	3m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-05M	5m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-10M	10m OS2 MPO(f)to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-20M	20m OS2 MPO(f)to 4X LC(DX) QSFP Breakout Yellow Cable Method B

MPO Trunk Cable

OM3 MPO Trunk Cable `AQUA`

MPO-FF-OM3-B-12-01M	1m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-1.5M	1.5m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-02M	2m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-03M	3m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-05M	5m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-7.5M	7.5m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-10M	10m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-15M	15m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-20M	20m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-25M	25m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-30M	30m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-50M	50m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B

OM4 MPO Trunk Cable `AQUA`

MPO-FF-OM4-B-12-01M	1m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-1.5M	1.5m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-02M	2m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-03M	3m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-05M	5m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-7.5M	7.5m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-10M	10m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-15M	15m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-20M	20m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-25M	25m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-30M	30m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-50M	50m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B

MPO to CS® Breakout Cable | Ruggedised Fibre Optic Leads | Armoured Ruggedised Patch Leads | APC Fibre Optic Patch Leads Fibre Networking

PART NO	DESCRIPTION

OS2 MPO Trunk Cable `YELLOW`

MPO-FF-OS2-B-12-01M	1m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-02M	2m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-03M	3m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-05M	5m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-10M	10m OS2 MPO(F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-20M	20m OS2 MPO(F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B

MPO to CS® Breakout Cable

OM4 MPO - CS® Breakout Cable

MPO-F-4CSDX-OM4-01M	1m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-02M	2m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-03M	3m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-05M	5m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-10M	10m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-20M	20m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B

OS2 MPO - CS® Breakout Cable

MPO-F-4CSDX-OS2-01M	1m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-02M	2m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-03M	3m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-05M	5m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-10M	10m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-20M	20m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B

OM4 CS® - CS® Duplex Patch Leads

4CSCS1	1m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS2	2m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS3	3m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS5	5m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS10	10m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead

PART NO	DESCRIPTION

OS2 CS® - CS® Duplex Patch Leads

9CSCS1	1m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS2	2m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS3	3m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS5	5m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS10	10m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead

OM4 CS® - LC Duplex Patch Leads

4CSLC1	1m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC2	2m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC3	3m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC5	5m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC10	10m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead

OS2 CS® UPC - LC UPC Duplex Patch Leads

9CSLC1	1m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC2	2m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC3	3m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC5	5m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC10	10m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead

Ruggedised Fibre Optic Leads

RUG3LCLC1	1m Ruggedised (Flat-Twin) OM3 50/125 LC-LC Aqua Fibre Patch Lead
RUG4LCLC1	1m Ruggedised (Flat-Twin) OM4 50/125 LC-LC Aqua Fibre Patch Lead
RUG9LCLC1	1m Ruggedised (Flat-Twin) OS2 9/125 LC-LC Aqua Fibre Patch Lead

Armoured Ruggedised Patch Leads

RUGA3LCLC1	1m Armoured Ruggedised OM3 50/125 LC-LC Aqua Fibre Patch Lead
RUGA4LCLC1	1m Armoured Ruggedised OM4 50/125 LC-LC Aqua Fibre Patch Lead
RUGA9LCLC1	1m Armoured Ruggedised OS2 9/125 LC-LC Yellow Fibre Patch Lead

APC Fibre Optic Patch Leads

9APCSLCLC1	1m OS2 9/125 LC APC - LC APC Simplex Yellow LSOH Fibre Patch Lead
9APCDLCLC1	1m OS2 9/125 LC APC - LC APC Duplex Yellow LSOH Fibre Patch Lead

Fibre Networking

XXtreme External IP67 Fibre Patch Leads

IP67 Waterproof Fibre Assemblies

IP67 Waterproof Fibre Patch Cables and IP67 Fibre Optic Adapters are reliable and cost-effective solutions for cabling in harsh environments. To provide robust protection for Fibre links, the designs of IP67 Waterproof Fibre Patch Cables and Adapters are different from the standard ones, especially around the contact interfaces. The picture to the right shows the structures an IP67 LC Fibre cable and an IP67 LC Fibre adapter.

IP67 LC-LC
Fibre Patch Cable

IP67 LC-LC
Fibre Adapter

PART NO	DESCRIPTION

IP67 LC-LC/SC-SC Fibre Patch Cable

IP67 LC to IP67 LC (Duplex), IP67 SC to IP67 SC (Simplex) single-mode Waterproof Fibre patch cables are designed to fit for outdoor applications. There are two types of IP67 LC/SC waterproof connector: IP67 plug and IP67 socket. The plug of one cable and the socket of the other cable can be connected to extend the cable length. These LC-LC/SC-SC waterproof Fibre patch cables will not get damage even when stepped on, and are anti-rodents, and suitable to use in harsh environments.

IP67 LC - IP67 LC

XE68-9LCLC1	1m OS2 IP67 LC - IP67 LC Duplex Black IP67 XXtreme External Fibre Patch Lead
XE68-9LCLC2	2m OS2 IP67 LC - IP67 LC Duplex Black IP67 XXtreme External Fibre Patch Lead
XE68-9LCLC5	5m OS2 IP67 LC - IP67 LC Duplex Black IP67 XXtreme External Fibre Patch Lead
XE68-9LCLC10	10m OS2 IP67 LC - IP67 LC Duplex Black IP67 XXtreme External Fibre Patch Lead
XE68-9LCLC20	20m OS2 IP67 LC - IP67 LC Duplex Black IP67 XXtreme External Fibre Patch Lead
XE68-3LCLC1	1m OM3 IP67 LC - IP67 LC Duplex Black IP67 XXtreme External Fibre Patch Lead
XE68-3LCLC10	10m OM3 IP67 LC - IP67 LC Duplex Black IP67 XXtreme External Fibre Patch Lead

IP67 LC - LC

XE68-3IPLCLC1	1m OM3 IP67 LC - LC Duplex Black IP67 XXtreme External Fibre Patch Lead
XE68-3IPLCLC10	10m OM3 IP67 LC - LC Duplex Black IP67 XXtreme External Fibre Patch Lead

These cables are made to order, please contact our sales team for more information.

PART NO	DESCRIPTION

IP67 Fibre Adapter

IP67 MPO bulkhead adapter is designed to provide a MPO cable to equipment fiber optic connection. The adapter meets IP67 environmental sealing ratings and is the ideal choice for a low cost and easy to use solution in Industrial, FTTA, or any other harsh environmental applications. The dust cap is the ideal way to protect ruggedized patch cords from exposure to elements or accidental damage when not mated to an outlet in your ruggedized cabling system.

XE68-2140	IP67 Bulkhead Adapter
XE68-2141	IP67 Rate Inline Adapter

Please see our XXTREME IP67 External Solid Patch Leads on Page 29

CABLENET   Tel. 01276 405300   Email. sales@cablenet.co.uk   Web. www.cablenet.co.uk

Inside this section...

What are Power Connectors?

Power connectors allow electronic devices to connect to available power outlets. Power cables can carry either Alternating Current (AC) or Direct Current (DC). An example of AC power would be power that is provided by a standard wall outlet in a home or office. An example of DC power would be power that is provided by a battery. There are several different types of connectors and interfaces that are used all over the world.

IEC 60320-1 Appliance Couplers

Connector (Female)	Appliance Inlet (Male)	Diagram	Earth Contact	Rewirable Connector Allowed?	Max. Current (A)	Remarks and Example Uses
BS1363	BS1363		✓	✓	13	Commonly known as UK Main Lead.
C5	C6		✓	✗	2.5	A polarized power socket often found on the power supplies used by notebook computers. The C5 connector has three round prongs arranged in a triangular fashion. One common slang term for this plug is "Mickey Mouse™ ears connector", because the shape resembles the silhouette of Disney's cartoon character.
C7	C8		✗	✗	2.5	The C7 coupler is commonly referred to as a "Figure of Eight". A 2-prong connector used on power transformers, radios, and other consumer electronic devices. It has two rounded prongs side-by-side.
C13	C14		✓	✓	10	The IEC 320 C13/C14 connectors are based on standards created by the International Electrotechnical Commission, an international standards body. The "320" refers to the number of the specification that describes power connectors. The official text of the standard is actually numbered 60320, but common vernacular usage shortens it to 320. The C13 line socket is very common in the PC and AV industry. The mating connector for the C13 socket is the C14 plug, and very common on personal computers and peripherals. Commonly but incorrectly referred to as a "kettle Cord or Kettle lead" but kettles actually require the C15/C15 connector and cable.
C15	C16		✓	✓	10	For use for higher temperatures settings, for example Kettle leads, computer networking cabinets. The official designation in Europe for the C15/C16 connector is a "hot Condition cable. These are similar to the C13 but with a much higher temperature rating, this is usually used for a kitchen appliance, and is known as a "Kettle lead". This is a "hot condition" cable which means it is rated to withstand higher temperatures. It looks similar to the IEC C13 / C14 connector but is differentiated by a cut out at the bottom of the connector. The C15 connector is typically used on mains cables; the C14 connector is used on devices.
C19	C20		✓	✓	16	This coupler is used for some IT applications where higher currents are required, as for instance, on high-power workstations and servers, uninterruptible power supplies, power distribution units, large network routers, and switches. A high amp rated connector usually used in high-power situations such as on workstations or servers. The C19 connector is used on mains cables; the C20 connector is used on devices, power supplies and extension cables. View the range of Lindy IEC C19/C20 IEC mains cables here.
C21	C22		✓	✓	16	High-temperature variant of C19/C20.

International Harmonised Cord Types Reference Chart

Harmonized Designation Code DIN VDE 0281/DIN VDE 0292 cord ex:H05VV-F 3G1.0

Identifications of Designation H05VV5-F 3G1.0

Harmonized Standards	H
Authorized National Standards	A

Nominal Voltage H05VV5-F 3G1.0

100 Volts AC	01
300/300 Volts AC	03
300/500 Volts AC	05
450/750 Volts AC	07

Insulating Material H05VV5-F 3G1.0

(EPR) Ethylene Propylene Rubber	B
(EVA) Ethylene Vinyl Acetate Copolymer	G
(CR) Chloroprene rubber for welding cables	N2
(NR a./o. SR) Natural a./o. Synthetic Rubber	R
(SiR) Silicone Rubber	S
(PVC) Polyvinyl Chloride	V
(PVC) Polyvinyl Chloride Heat-resistant	V2
(PVC) Polyvinyl Chloride Low-temperature	V3
(PVC) Polyvinyl Chloride Cross-linked	V4
(PE) Polyethylene Cross-linked	Z
Halogen-free Thermoplastic Compound of Polyolefine	Z1

Sheath/Jacket Material H05VV5-F 3G1.0

(EPR) Ethylene Propylene Rubber	B
Glass Fiber Braid	J
(CR) Chloroprene Rubber	N
(CR) Chloroprene rubber for welding cables	N2
(CR) Chloroprene Rubber Heat-resistant	N4
(PUR) Polyurethane	Q
(NR a./o. SR) Natural a./o. Synthetic Rubber	R
Textile Braid	T
Textile Braid with Flame Retardant Compound	T2
(PVC) Polyvinyl Chloride	V
(PVC) Polyvinyl Chloride Heat-resistant	V2
(PVC) Polyvinyl Chloride Low-temperature	V3
(PVC) Polyvinyl Chloride Cross-linked	V4
(PVC) Polyvinyl Chloride Oil-resistant	V5

Special Structural Features H05VV5D3-F 3G1.0

Stress Relieving Elements (support wire)	D3
Center Core (no supporting element)	D5
Telecommunications Cores Integrated in Power Cables	FM
Flat Separable Cable (twin cable)	H
Flat Non Separable Cable (two core sheathed cable)	H2
Flat Non Separable Cable (multi and multiple sheathed cable)	H6
Two Layer Insulating Jacket	H7
Spiral Cables	H8

Conductor Type H05VV5-F 3G1.0

Finely Stranded for Welding Cables	D
Very Finely Stranded for Welding Cables	E
Finely Stranded for Cables for Fixed Installation	F and K
Very Finely Stranded for Cables for Fixed Installation	H
Round Multiple Wire Class 2	R
Round Single Wire Class 1	U
Tinsel Wire DIN 47104	Y

Number of Cores H05VV5-F 3G1.0

Number of Cores	#

Earth Core H05VV5-F 3G1.0

With Earth Core	G
Without Earth Core	X

Conductor Nominal Cross Section in mm² H05VV-F 3G1.0

mm² (Gauge)	#

ALL OUR POWER LEADS ARE MANUFACTURED IN OUR CATEGORY A POWER LEAD FACTORY

Being 1 out of only 8 factories worldwide who supply leading named blue chip, high end power products to market leading IT customers.

Conducting around 250 audits a year enables our quality standards to be at the very highest level across our power range. Being connected to all of the significant safety agencies mean that all our products meet industry set regulations and are always 100% compliant.

This all equates to Cablenet supplying our customers with the highest quality power leads that the market has to offer.

CABLENET

Tel. 01276 405300   **Email.** sales@cablenet.co.uk   **Web.** www.cablenet.co.uk

Power Leads & PDUs

PART NO	DESCRIPTION
UK Mains Cables	
42-0542	2m IEC C14 - Right Angle IEC C13 Black PVC 1.0mm Power Leads
42-0544	2m UK (5Amp) - Right Angle IEC C13 Black PVC 0.75mm Mains Power Lead Cable
42-0545-18	1.8m UK (13Amp) - IEC C15 Hot Condition Black H05RN-F 1.0mm Power Lead
42-0545	2m UK (13Amp) - IEC C15 Hot Condition Black H05RN-F 1.0mm Mains Power Lead Cable
42-0545-WH	2m UK (13Amp) - IEC C15 Hot Condition White H05RN-F 1.0mm Power Lead
42-0557	0.5m UK (5Amp) - IEC C13 Black PVC 0.75mm Mains Power Lead Cable
42-0558	1m UK (5Amp) - IEC C13 Black PVC 0.75mm Mains Power Lead Cable
42-0559-18	1.8m UK (5Amp) - IEC C13 Black Mains Power Lead Cable
42-0559	2m UK (5Amp) - IEC C13 Black PVC 0.75mm Mains Power Lead Cable
42-2887	3m UK (5Amp) - IEC C13 Black PVC 1.0mm Mains Power Lead Cable
42-2888	5m UK (5Amp) - IEC C13 Black PVC 1.0mm Mains Power Lead Cable
42-2901	10m UK (5Amp) - IEC C13 Black PVC 1.0mm Mains Power Lead Cable
42-3287	2m UK (13Amp) - IEC C13 Black PVC 1.0mm Mains Power Lead Cable
42-3547	2.5m UK (13Amp) - 2 x IEC C13 0.5m Legs Black PVC Mains Power Lead Cable
42-3548	2.5m UK (13Amp) - 2 x IEC C13 1.5m Legs Black PVC Mains Power Lead Cable
42-0560-18	1.8m UK (5Amp) - IEC C5 Cloverleaf Black PVC 0.75mm Power Lead
42-0560	2m UK (5Amp) - IEC C5 Cloverleaf Black PVC 0.75mm Mains Power Lead Cable
42-0560-WH	2m UK (5Amp) - IEC C5 Cloverleaf White PVC 0.75mm Power Lead
42-0579	5m UK (5Amp) - IEC C5 Cloverleaf Black PVC 0.75mm Mains Power Lead Cable
42-2593	5m UK (3Amp) - IEC C7 Figure of 8 Black PVC 0.75mm Mains Power Lead Cable
42-2594	2m UK (3Amp) - IEC C7 Figure of 8 Black PVC 0.75mm Mains Power Lead Cable
International Mains Cables	
42-0546	2.5m Right Angle Euro Plug Schuko - IEC C19 Black PVC 1.5mm Power Lead
42-0552	2m Right Angle Euro Plug Schuko - IEC C5 Cloverleaf Black PVC 0.75mm Power Lead
42-0556	2m Euro 2 Pin Flat - IEC C7 Figure of 8 Black PVC 0.75mm Power Lead
42-0562	2.5m Right Angle Euro Plug Schuko - IEC C15 Hot Black H05RN-F 1.0mm Power Lead
42-0563	2m Right Angle Euro Plug Schuko - IEC C13 Black PVC 0.75mm Power Lead

PART NO	DESCRIPTION
42-0564-18	1.8m Straight Euro Plug Schuko - IEC C13 Black PVC 0.75mm Power Lead
42-0564	2m Straight Euro Plug Schuko - IEC C13 Black PVC 0.75mm Power Lead
42-0566	2.5m Italian Plug - IEC C13 Black PVC 1.0mm Power Lead
42-0571	2m Swiss Plug - IEC C13 Black PVC 1.0mm Power Lead
42-0578	2m Italian Plug - IEC C13 Black PVC 0.75mm Power Lead
42-0554	2m USA Plug (2Pin) - IEC C7 Figure of 8 Black PVC Power Lead
42-0555	2m USA Plug (3Pin) - IEC C5 Cloverleaf Black PVC Power Lead
42-2595	2m USA Plug (3Pin) - IEC C13 Black PVC Power Lead
42-2597	2m USA Plug (3 Pin) - IEC C15 Black PVC Power Lead
42-2696	2m USA Plug (3Pin) - IEC C19 Black PVC Power Lead
42-2596	2m Australian (3Pin) - IEC C13 Black PVC 0.75mm Power Lead
42-2598	2m Australian (3Pin) - IEC C5 Black PVC 0.75mm Power Lead
IEC Extension Leads	
42-2971	1m IEC C14 - IEC C19 Black PVC 1.5mm Power Lead
42-2972	2m IEC C14 - IEC C19 Black PVC 1.5mm Power Lead
42-2973	3m IEC C14 - IEC C19 Black PVC 1.5mm Power Lead
42-2978	0.75m IEC C14 - IEC C15 Hot Condition Black H05RR-F 0.75mm Power Lead
42-2979	1m IEC C14 - IEC C15 Hot Condition Black H05RR-F 0.75mm Power Lead
42-2980	2m IEC C14 - IEC C15 Hot Condition Black H05RR-F 0.75mm Power Lead
42-2981	3m IEC C14 - IEC C15 Hot Condition Black H05RN-F 1.0mm Power Lead
42-2982	5m IEC C14 - IEC C15 Hot Condition Black H05RN-F 1.0mm Power Lead
42-2975	1m IEC C14 - IEC C15 Hot Condition White H05RR-F 0.75mm Power Leads
42-2976	2m IEC C14 - IEC C15 Hot Condition White H05RR-F 0.75mm Power Leads
42-2977	3m IEC C14 - IEC C15 Hot Condition White H05RR-F 0.75mm Power Leads
42-2995	1m IEC C14 - IEC C15 Hot Condition Red H05RR-F 0.75mm Power Leads
42-2996	2m IEC C14 - IEC C15 Hot Condition Red H05RR-F 0.75mm Power Leads
42-2997	3m IEC C14 - IEC C15 Hot Condition Red H05RR-F 0.75mm Power Leads

Power Leads & PDUs

IEC Extension Leads

PART NO	DESCRIPTION
IEC Extension Leads	
42-2998	1m IEC C14 - IEC C15 Hot Condition Blue H05RR-F 0.75mm Power Leads
42-2999	2m IEC C14 - IEC C15 Hot Condition Blue H05RR-F 0.75mm Power Leads
42-3000	3m IEC C14 - IEC C15 Hot Condition Blue H05RR-F 0.75mm Power Leads
42-2985	2m IEC C14 - IEC C5 Cloverleaf Black PVC 0.75mm Power Lead
42-2986	2m IEC C14 - IEC C7 Figure of 8 Black PVC 0.75mm Power Lead
42-2990	0.5m IEC C14 - IEC C15 Hot Condition Orange H05RR-F 1.0mm Power Lead
42-2991	1m IEC C14 - IEC C15 Hot Condition Orange H05RR-F 1.0mm Power Lead
42-2992	1.5m IEC C14 - IEC C15 Hot Condition Orange H05RR-F 1.0mm Power Lead
42-2993	2m IEC C14 - IEC C15 Hot Condition Orange H05RR-F 1.0mm Power Lead
42-2994	3m IEC C14 - IEC C15 Hot Condition Orange H05RR-F 1.0mm Power Lead
IEC C14 - IEC C13 PVC Leads ORANGE	
42-2670	0.5m IEC C14 - IEC C13 Orange PVC 1.0mm Power Lead
42-2671	1m IEC C14 - IEC C13 Orange PVC 1.0mm Power Lead
42-2672	1.5m IEC C14 - IEC C13 Orange PVC 1.0mm Power Lead
42-2673	2m IEC C14 - IEC C13 Orange PVC 1.0mm Power Lead
42-2674	3m IEC C14 - IEC C13 Orange PVC 1.0mm Power Lead
IEC C14 - IEC C13 PVC Leads GREEN	
42-2680	0.3m IEC C14 - IEC C13 Green PVC 0.75mm Power Lead
42-2681	0.5m IEC C14 - IEC C13 Green PVC 0.75mm Power Lead
42-2682	1m IEC C14 - IEC C13 Green PVC 0.75mm Power Lead
42-2683	2m IEC C14 - IEC C13 Green PVC 0.75mm Power Lead
42-2684	3m IEC C14 - IEC C13 Green PVC 1.0mm Power Lead
IEC C14 - IEC C13 PVC Leads GREY	
42-2690	0.3m IEC C14 - IEC C13 Grey PVC 0.75mm Power Lead
42-2691	0.5m IEC C14 - IEC C13 Grey PVC 0.75mm Power Lead
42-2692	1m IEC C14 - IEC C13 Grey PVC 0.75mm Power Lead
42-2693	2m IEC C14 - IEC C13 Grey PVC 0.75mm Power Lead
42-2694	3m IEC C14 - IEC C13 Grey PVC 1.0mm Power Lead
IEC C14 - IEC C13 PVC Leads RED	
42-2699	0.3m IEC C14 - IEC C13 Red PVC 0.75mm Power Lead
42-2700	0.5m IEC C14 - IEC C13 Red PVC 0.75mm Power Lead
42-2701	1m IEC C14 - IEC C13 Red PVC 0.75mm Power Lead
42-2702	2m IEC C14 - IEC C13 Red PVC 0.75mm Power Lead
42-2703	3m IEC C14 - IEC C13 Red PVC 1.0mm Power Lead

PART NO	DESCRIPTION
IEC C14 - IEC C13 PVC Leads BLUE	
42-2709	0.3m IEC C14 - IEC C13 Blue PVC 0.75mm Power Lead
42-2710	0.5m IEC C14 - IEC C13 Blue PVC 0.75mm Power Lead
42-2711	1m IEC C14 - IEC C13 Blue PVC 0.75mm Power Lead
42-2712	2m IEC C14 - IEC C13 Blue PVC 0.75mm Power Lead
42-2713	3m IEC C14 - IEC C13 Blue PVC 1.0mm Power Lead
IEC C14 - IEC C13 PVC Leads WHITE	
42-2719	0.3m IEC C14 - IEC C13 White PVC 0.75mm Power Lead
42-2720	0.5m IEC C14 - IEC C13 White PVC 0.75mm Power Lead
42-2721	1m IEC C14 - IEC C13 White PVC 0.75mm Power Lead
42-2722	2m IEC C14 - IEC C13 White PVC 0.75mm Power Lead
42-2723	3m IEC C14 - IEC C13 White PVC 1.0mm Power Lead
IEC C14 - IEC C13 PVC Leads BLACK	
42-2958	0.3m IEC C14 - IEC C13 Black PVC 0.75mm Power Lead
42-2960	0.5m IEC C14 - IEC C13 Black PVC 0.75mm Power Lead
42-2961	1m IEC C14 - IEC C13 Black PVC 0.75mm Power Lead
42-2959	1.5m IEC C14 - IEC C13 Black PVC 0.75mm Power Lead
42-0561	2m IEC C14 - IEC C13 Black PVC 0.75mm Power Lead
42-2962	3m IEC C14 - IEC C13 Black PVC 1.0mm Power Lead
42-2963	5m IEC C14 - IEC C13 Black PVC 1.0mm Power Lead
42-2964	10m IEC C14 - IEC C13 Black PVC 1.0mm Power Lead
IEC C20 - IEC C19 PVC Leads BLACK	
42-0574	0.5m IEC C20 - IEC C19 Black PVC 1.5mm Power Lead
42-0570	1m IEC C20 - IEC C19 Black PVC 1.5mm Power Lead
42-0568	2.5m IEC C20 - IEC C19 Black PVC 1.5mm Power Lead
42-0572	5m IEC C20 - IEC C19 Black PVC 1.5mm Power Lead
IEC C20 - IEC C19 PVC Leads RED	
42-2730	0.5m IEC C20 - IEC C19 Red PVC 1.5mm Power Lead
42-2731	1m IEC C20 - IEC C19 Red PVC 1.5mm Power Lead
42-2732	2.5m IEC C20 - IEC C19 Red PVC 1.5mm Power Lead
42-2734	5m IEC C20 - IEC C19 Red PVC 1.5mm Power Leads
IEC C20 - IEC C19 PVC Leads BLUE	
42-2740	0.5m IEC C20 - IEC C19 Blue PVC 1.5mm Power Lead
42-2741	1m IEC C20 - IEC C19 Blue PVC 1.5mm Power Lead
42-2742	2.5m IEC C20 - IEC C19 Blue PVC 1.5mm Power Lead

IEC Extension Leads | LSOH Power Leads | Commando Power Leads | Locking Power Leads

Power Leads & PDUs

PART NO	DESCRIPTION
IEC C20 - IEC C19 PVC Leads WHITE	
42-2750	0.5m IEC C20 - IEC C19 White PVC 1.5mm Power Lead
42-2751	1m IEC C20 - IEC C19 White PVC 1.5mm Power Lead
42-2752	2.5m IEC C20 - IEC C19 White PVC 1.5mm Power Lead
IEC C20 - IEC C13 PVC Leads BLACK	
42-0592	2m IEC C20 - IEC C13 Black PVC 1.5mm Power Lead
42-0594	5m IEC C20 - IEC C13 Black PVC 1.5mm Power Lead
UK (13 Amp) - IEC C19 PVC Leads BLACK	
42-0565	2.5m UK (13Amp) - IEC C19 Black PVC 1.5mm Mains Power Lead Cable
42-0577	5m UK (13Amp) - IEC C19 Black PVC 1.5mm Mains Power Lead Cable
IEC C14 - 2 x IEC C13 PVC Leads BLACK	
42-3540	1m IEC C14 - 2 x IEC C13 0.5m Legs Black PVC Power Lead
42-0567	2.5m IEC C14 - 2 x IEC C13 0.5m Legs Black PVC Power Lead
42-3546	2.5m IEC C14 - 2 x IEC C13 1.5m Legs Black PVC Power Lead
Hot C21 - C20 16 Amp PVC Leads BLACK	
42-0521	1.8m Hot C20 - C21 (20Amp) 1.5mm Black Power Lead
42-0523	3m Hot C20 - C21 (20Amp) 1.5mm Black Power Lead

LSOH Power Leads

42-0558-LS	1m UK (5Amp) - IEC C13 H05Z1Z1-F Black LSOH 1.0mm Mains Power Lead Cable
42-0559-LS	2m UK (5Amp) - IEC C13 H05Z1Z1-F Black LSOH 1.0mm Mains Power Lead Cable
42-2887-LS	3m UK (5Amp) - IEC C13 H05Z1Z1-F Black LSOH 1.0mm Mains Power Lead Cable
42-2888-LS	5m UK (5Amp) - IEC C13 H05Z1Z1-F Black LSOH 1.0mm Mains Power Lead Cable
42-2960-LS	0.5m IEC C14 - IEC C13 H05Z1Z1-F Black LSOH 0.75mm Power Lead
42-2961-LS	1m IEC C14 - IEC C13 H05Z1Z1-F Black LSOH 0.75mm Power Lead
42-2959-LS	1.5m IEC C14 - IEC C13 H05Z1Z1-F Black LSOH 0.75mm Power Lead
42-0561-LS	2m IEC C14 - IEC C13 H05Z1Z1-F Black LSOH 0.75mm Power Lead
42-2962-LS	3m IEC C14 - IEC C13 H05Z1Z1-F Black LSOH 1.0mm Power Lead
42-2963-LS	5m IEC C14 - IEC C13 H05Z1Z1-F Black LSOH 1.0mm Power Lead
42-0570-LS	1m IEC C20 - IEC C19 H05Z1Z1-F Black LSOH 1.5mm Power Lead
42-0568-LS	2.5m IEC C20 - IEC C19 H05Z1Z1-F Black LSOH 1.5mm Power Lead
42-0572-LS	5m IEC C20 - IEC C19 H05Z1Z1-F Black LSOH 1.5mm Power Lead

PART NO	DESCRIPTION
Commando Power Leads	
42-4047	2m (16Amp) Commando - IEC-C19 Black PVC 1.5mm Power Lead
42-4049	3m (16Amp) Commando - IEC-C19 Black PVC 1.5mm Power Lead
42-4050	5m (16Amp) Commando - IEC-C19 Black PVC 1.5mm Power Lead

Locking Power Leads

IEC C14 - IEC C13 Lock PVC Leads BLACK	
42-3010	1m IEC C14 - IEC C13 IEC Lock Black PVC 1.0mm Power Lead
42-3011	2m IEC C14 - IEC C13 IEC Lock Black PVC 1.0mm Power Lead
42-3012	3m IEC C14 - IEC C13 IEC Lock Black PVC 1.0mm Power Lead
IEC C14 - IEC C13 Lock PVC Leads ORANGE	
42-3018	0.5m IEC C14 - IEC C13 IEC Lock Orange PVC 1.0mm Power Lead
42-3019	1m IEC C14 - IEC C13 IEC Lock Orange PVC 1.0mm Power Lead
42-3020	2m IEC C14 - IEC C13 IEC Lock Orange PVC 1.0mm Power Lead
42-3021	3m IEC C14 - IEC C13 IEC Lock Orange PVC 1.0mm Power Lead
42-3022	4m IEC C14 - IEC C13 IEC Lock Orange PVC 1.0mm Power Lead
42-3023	5m IEC C14 - IEC C13 IEC Lock Orange PVC 1.0mm Power Lead
IEC C14 - IEC C13 Lock PVC Leads BLUE	
42-3030	0.5m IEC C14 - IEC C13 IEC Lock Blue PVC 1.0mm Power Lead
42-3031	1m IEC C14 - IEC C13 IEC Lock Blue PVC 1.0mm Power Lead
42-3032	2m IEC C14 - IEC C13 IEC Lock Blue PVC 1.0mm Power Lead
42-3033	3m IEC C14 - IEC C13 IEC Lock Blue PVC 1.0mm Power Lead
IEC C14 - IEC C13 Lock PVC Leads WHITE	
42-3037	1m IEC C14 - IEC C13 IEC Lock White PVC 1.0mm Power Lead
42-3038	2m IEC C14 - IEC C13 IEC Lock White PVC 1.0mm Power Lead
42-3039	3m IEC C14 - IEC C13 IEC Lock White PVC 1.0mm Power Lead
IEC C14 - IEC C13 Lock PVC Leads RED	
42-3041	0.5m IEC C14 - IEC C13 IEC Lock Red PVC 1.0mm Power Lead
42-3042	1m IEC C14 - IEC C13 IEC Lock Red PVC 1.0mm Power Lead
42-3043	2m IEC C14 - IEC C13 IEC Lock Red PVC 1.0mm Power Lead
42-3044	3m IEC C14 - IEC C13 IEC Lock Red PVC 1.0mm Power Lead

Minimum pack quantities may apply. Please contact the sales team for more details.

Power Leads & PDUs

Locking Power Leads | Dual Locking Power Leads

PART NO	DESCRIPTION
IEC C14 - IEC C13 Lock + PVC Leads BLACK	
42-3120	0.5m IEC C14 - IEC C13 IEC Lock + Black PVC 1.0mm Power Lead
42-3121	1m IEC C14 - IEC C13 IEC Lock + Black PVC 1.0mm Power Lead
42-3122	1.5m IEC C14 - IEC C13 IEC Lock + Black PVC 1.0mm Power Lead
42-3123	2m IEC C14 - IEC C13 IEC Lock + Black PVC 1.0mm Power Lead
42-3124	3m IEC C14 - IEC C13 IEC Lock + Black PVC 1.0mm Power Lead
42-3125	5m IEC C14 - IEC C13 IEC Lock + Black PVC 1.0mm Power Leads
IEC C14 - IEC C13 Lock + PVC Leads ORANGE	
42-3130	0.5m IEC C14 - IEC C13 IEC Lock + Orange PVC 1.0mm Power Lead
42-3131	1m IEC C14 - IEC C13 IEC Lock + Orange PVC 1.0mm Power Lead
42-3132	1.5m IEC C14 - IEC C13 IEC Lock + Orange PVC 1.0mm Power Lead
42-3133	2m IEC C14 - IEC C13 IEC Lock + Orange PVC 1.0mm Power Lead
UK - IEC C13 | Right Angle Schuko | USA Plug - IEC C13 Lock PVC Leads BLACK	
42-3004	2m Right Angle Schuko - IEC C13 IEC Lock Black PVC 1.0mm Power Lead
UK - IEC C13 Lock PVC Leads BLACK	
42-3001	2m UK - IEC C13 IEC Lock Black PVC 1.0mm Power Leads
IEC C20 - IEC C19 Lock PVC Leads BLACK	
42-3051	1m IEC C20 - IEC C19 IEC Lock Black PVC 1.5mm Power Lead
42-3052	2m IEC C20 - IEC C19 IEC Lock Black PVC 1.5mm Power Lead
42-3053	3m IEC C20 - IEC C19 IEC Lock Black PVC 1.5mm Power Lead
IEC C20 - IEC C19 Lock PVC Leads BLUE	
42-3071	1m IEC C20 - IEC C19 IEC Lock Blue PVC 1.5mm Power Lead
42-3072	2m IEC C20 - IEC C19 IEC Lock Blue PVC 1.5mm Power Lead
42-3073	3m IEC C20 - IEC C19 IEC Lock Blue PVC 1.5mm Power Lead
IEC C20 - IEC C19 Lock PVC Leads ORANGE	
42-3081	1m IEC C20 - IEC C19 IEC Lock Orange PVC 1.5mm Power Lead
42-3083	3m IEC C20 - IEC C19 IEC Lock Orange PVC 1.5mm Power Lead
IEC C20 - IEC C19 Lock PVC Leads WHITE	
42-3091	1m IEC C20 - IEC C19 IEC Lock White PVC 1.5mm Power Lead
42-3092	2m IEC C20 - IEC C19 IEC Lock White PVC 1.5mm Power Lead
IEC C20 - IEC C19 Lock PVC Leads RED	
42-3101	1m IEC C20 - IEC C19 IEC Lock Red PVC 1.5mm Power Lead
42-3102	2m IEC C20 - IEC C19 IEC Lock Red PVC 1.5mm Power Lead
42-3103	3m IEC C20 - IEC C19 IEC Lock Red PVC 1.5mm Power Lead

Minimum pack quantities may apply. Please contact the sales team for more details.

PART NO	DESCRIPTION
UK (13 Amp) - IEC C19 Lock PVC Leads BLACK	
42-3060	2m UK (13Amp) - IEC C19 IEC Lock Black PVC 1.5mm Power Lead

Dual Locking Power Leads

PART NO	DESCRIPTION
IEC C14 - IEC C13 Dual Lock PVC Leads BLACK	
42-5005	0.5m IEC C14 - IEC C13 Dual Lock Black PVC 1.0mm Power Leads
42-5010	1m IEC C14 - IEC C13 Dual Lock Black PVC 1.0mm Power Leads
42-5020	2m IEC C14 - IEC C13 Dual Lock Black PVC 1.0mm Power Leads
42-5030	3m IEC C14 - IEC C13 Dual Lock Black PVC 1.0mm Power Leads
IEC C14 - IEC C13 Dual Lock PVC Leads BLUE	
42-5105	0.5m IEC C14 - IEC C13 Dual Lock Blue PVC 1.0mm Power Leads
42-5110	1m IEC C14 - IEC C13 Dual Lock Blue PVC 1.0mm Power Leads
42-5120	2m IEC C14 - IEC C13 Dual Lock Blue PVC 1.0mm Power Leads
42-5130	3m IEC C14 - IEC C13 Dual Lock Blue PVC 1.0mm Power Leads
IEC C14 - IEC C13 Dual Lock PVC Leads RED	
42-5205	0.5m IEC C14 - IEC C13 Dual Lock Red PVC 1.0mm Power Leads
42-5210	1m IEC C14 - IEC C13 Dual Lock Red PVC 1.0mm Power Leads
42-5220	2m IEC C14 - IEC C13 Dual Lock Red PVC 1.0mm Power Leads
42-5230	3m IEC C14 - IEC C13 Dual Lock Red PVC 1.0mm Power Leads
IEC C19 - IEC C20 Dual Lock PVC Leads BLACK	
42-5510	1m IEC C20 - IEC C19 Dual Lock Black PVC 1.5mm Power Leads
42-5520	2m IEC C20 - IEC C19 Dual Lock Black PVC 1.5mm Power Leads
42-5530	3m IEC C20 - IEC C19 Dual Lock Black PVC 1.5mm Power Leads
IEC C19 - IEC C20 Dual Lock PVC Leads BLUE	
42-5610	1m IEC C20 - IEC C19 Dual Lock Blue PVC 1.5mm Power Leads
42-5620	2m IEC C20 - IEC C19 Dual Lock Blue PVC 1.5mm Power Leads
42-5630	3m IEC C20 - IEC C19 Dual Lock Blue PVC 1.5mm Power Leads
IEC C19 - IEC C20 Dual Lock PVC Leads RED	
42-5710	1m IEC C20 - IEC C19 Dual Lock Red PVC 1.5mm Power Leads
42-5720	2m IEC C20 - IEC C19 Dual Lock Red PVC 1.5mm Power Leads
42-5730	3m IEC C20 - IEC C19 Dual Lock Red PVC 1.5mm Power Leads

Minimum pack quantities may apply. Please contact the sales team for more details.

Power Leads & PDUs

PART NO	DESCRIPTION

EU Trailing Sockets

42-0525	25cm EU Socket - C14 1mm

UK Trailing Sockets

42-0526	25cm UK Socket (BS1363) - IEC C14 1.0mm
42-0569	4 Way UK White (13Amp) Surge Protected Power Strip with 2m Lead
42-0573	6 Way UK White (13Amp) Surge Protected Power Strip with 2m Lead
42-0575	4 Way UK White (13Amp) Surge Protected Power Strip with 5m Lead
42-0576	6 Way UK White (13Amp) Surge Protected Power Strip with 5m Lead
PB-4W2MB	4 Way UK Black (13Amp) Surge Protected Power Strip with 2m Lead
PB-4W5MB	4 Way UK Black (13Amp) Surge Protected Power Strip with 5m Lead
PB-4W10MB	4 Way UK Black (13Amp) Surge Protected Power Strip with 10m Lead
PB-6W2MB	6 Way UK Black (13Amp) Surge Protected Power Strip with 2m Lead
PB-6W5MB	6 Way UK Black (13Amp) Surge Protected Power Strip with 5m Lead
PB-6W10MB	6 Way UK Black (13Amp) Surge Protected Power Strip with 10m Lead
PB4-651B	4 Way UK Black (13Amp) Trailing Socket Rewireable
PB4-C14	4 Way Black 1m Power Extension - C14

Power Connectors

PLUGS801W	UK Mains Plug (13Amp) White (BS1363)
PLUGS802B	UK Mains Plug (13Amp) Black (BS1363)
42-0490	UK Mains Socket (13Amp) Rewireable Black (BS1363)
42-0492	C13 (10Amp) IEC Lock + Power LSOH Connector (Screw)
42-0498	C13 Right Angle (10Amp) Power Connector (Screw)
42-0499	C14 Right Angle (10Amp) Power Connector (Screw)
42-0500	C15 Left Angle (10Amp) Hot Condition Power Connector (Screw)
42-0502	C19 (16Amp) Power Connector (Screw)
42-0503	C20 (16Amp) Power Connector (Screw)
42-0505	C15 (10Amp) Hot Condition Power Connector (Screw)
42-0506	C21 (16Amp) Hot Condition Power Connector (Screw)
42-0507	C20 Right Angle (16Amp) Power Connector (Screw)
42-0508	C19 Right Angle (16Amp) Power Connector (Screw)
IECPLUG275HQ	C14 (10Amp) Power Connector (Screw)
IECSOCKET245HQ	C13 (10Amp) Power Connector (Screw)

PART NO	DESCRIPTION
42-0511	Commando Plug (32Amp) (2P+E) Blue 240v
42-0512	Commando Socket (16Amp) Single Phase (2P+E) Blue 240v
PW-2950	IEC Male C14 - Figure of 8 C7 Power Adaptor
PW-2951	IEC Male C14 – Cloverleaf C5 Power Adaptor

Power Cable

CAB3M1.5BLS	100m Mains 3 Core 1.5mm 3183B Black LSOH Cable
CAB3M1BLS	100m Mains 3 Core 1mm 3183B Black LSOH Cable

Power Adaptors

UK Charger Plug

42-0413	UK Mains Charger Plug - USB Adaptor White

Power Adaptor

42-0410	UK 3 Pin Socket to Euro 2 Pin Travel Adaptor White
42-0414	UK Mains Charger Plug - USB Adaptor Black

PDUs - UK Horizontal

UK Horizontal

4 Way

PDU4H	4 Way UK Horizontal 1.5u PDU with UK 3m Feed
PDU4HC14	4 Way UK Horizontal 1.5u PDU with IEC - C14 3m Feed
PDU4HC20	4 Way UK Horizontal 1.5u PDU with IEC - C20 3m Feed
PDU4H16A	4 Way UK Horizontal 1.5u PDU with (16Amp) Commando 3m Feed

6 Way

PDU6H	6 Way UK Horizontal 1u PDU with UK 3m Feed
PDU6HF	6 Way UK Horizontal 1u PDU Filtered with UK 3m Feed
PDU6HFLW	6 Way UK Horizontal 1U PDU with UK 3m Feed
PDU6HC14	6 Way UK Horizontal 1u PDU with IEC - C14 3m Feed
PDU6HC20	6 Way UK Horizontal 1u PDU with IEC - C20 3m Feed
PDU6H16A	6 Way UK Horizontal 1u PDU with (16Amp) Commando 3m Feed
PDU6H32A	6 Way UK Horizontal 1.5u PDU with (32Amp) Commando 3m Feed

Power Leads & PDUs

PART NO	DESCRIPTION
8 Way	
PDU8H	8 Way UK Horizontal 1u PDU with UK 3m Feed
PDU8HC14	8 Way UK Horizontal 1u PDU with IEC - C14 3m Feed
PDU8HC20	8 Way UK Horizontal 1u PDU with IEC - C20 3m Feed
PDU8H16A	8 Way UK Horizontal 1u PDU with (16Amp) Commando 3m Feed

PDUs - UK Vertical

UK Vertical

4 Way

PDU4V	4 Way UK Vertical PDU with UK 3m Feed
PDU4VC14	4 Way UK Vertical PDU with IEC - C14 3m Feed
PDU4VC20	4 Way UK Vertical PDU with IEC - C20 3m Feed

5 Way

PDU5V	5 Way UK Vertical PDU with UK 3m Feed

6 Way

PDU6V	6 Way UK Vertical PDU with UK 3m Feed
PDU6VC14	6 Way UK Vertical PDU with IEC - C14 3m Feed
PDU6VC20	6 Way UK Vertical PDU with IEC - C20 3m Feed

8 Way

PDU8V	8 Way UK Vertical PDU with UK 3m Feed
PDU8VF	8 Way UK Vertical PDU with UK 3m Feed
PDU8VC14	8 Way UK Vertical PDU with IEC - C14 3m Feed
PDU8VC20	8 Way UK Vertical PDU with IEC - C20 3m Feed
PDU8V16A	8 Way UK Vertical PDU with (16Amp) Commando 3m Feed

10 Way

PDU10V	10 Way UK Vertical PDU with UK 3m Feed
PDU10VC14	10 Way UK Vertical PDU with IEC - C14 3m Feed
PDU10VC20	10 Way UK Vertical PDU with IEC - C20 3m Feed
PDU10V16A	10 Way UK Vertical PDU with (16Amp) Commando 3m Feed

PART NO	DESCRIPTION
12 Way	
PDU12V	12 Way UK Vertical PDU with UK 3m Feed
PDU12VF	12 Way UK Vertical PDU with UK 3m Feed
PDU12VC14	12 Way UK Vertical PDU with IEC - C14 3m Feed
PDU12VC20	12 Way UK Vertical PDU with IEC - C20 3m Feed
PDU12V16A	12 Way UK Vertical PDU with (16Amp) Commando 3m Feed
PDU12V32A	12 Way UK Vertical 1.5U PDU with 32 Amp Commando 3m Feed
16 Way	
PDU16VC14	16 Way UK Vertical PDU with IEC - C14 3m Feed
PDU16VC20	16 Way UK Vertical PDU with IEC - C20 3m Feed
PDU16V16A	16 Way UK Vertical PDU with (16Amp) Commando 3m Feed

PDUs - IEC C13 Horizontal

IEC C13 Horizontal

6 Way

IEC6H	6 Way IEC - C13 Horizontal 1u PDU with UK 3m Feed
IEC6HC14	6 Way IEC - C13 Horizontal 1u PDU with IEC - C14 3m Feed
IEC6HC20	6 Way IEC - C13 Horizontal 1.5u PDU with IEC - C20 3m Feed

8 Way

IEC8H	8 Way IEC - C13 Horizontal 1u PDU with UK 3m Feed
IEC8HC14	8 Way IEC - C13 Horizontal 1u PDU with IEC - C14 3m Feed
IEC8HC20	8 Way IEC - C13 Horizontal 1u PDU with IEC - C20 3m Feed

10 Way

IEC10H	10 Way IEC - C13 Horizontal 1u PDU with UK 3m Feed
IEC10HC14	10 Way IEC - C13 Horizontal 1u PDU with IEC - C14 3m Feed
IEC10HC20	10 Way IEC - C13 Horizontal 1u PDU with IEC - C20 3m Feed
IEC10H16A	10 Way IEC - C13 Horizontal 1.5u PDU with (16Amp) Commando 3m Feed

12 Way

IEC12H	12 Way IEC - C13 Horizontal 1u PDU with UK 3m Feed
IEC12HC14	12 Way IEC - C13 Horizontal 1u PDU with IEC - C14 3m Feed

PDUs - IEC C13 Horizontal | PDUs - IEC C13 Vertical | POD Desktop Power

Power Leads & PDUs

PART NO	DESCRIPTION
IEC12HC20	12 Way IEC - C13 Horizontal 1u PDU with IEC - C20 3m Feed
IEC12H16A	12 Way IEC - C13 Horizontal 1u PDU with (16Amp) Commando 3m Feed
16 Way	
IEC16H	16 Way IEC - C13 Horizontal 1.5u PDU with UK 3m Feed

PDUs - IEC C13 Vertical

IEC C13 Vertical

8 Way

IEC8V	8 Way IEC - C13 Vertical PDU with UK 3m Feed
IEC8VC14	8 Way IEC - C13 Vertical PDU with IEC - C14 3m Feed
IEC8VC20	8 Way IEC - C13 Vertical PDU with IEC - C20 3m Feed

10 Way

IEC10V	10 Way IEC - C13 Vertical PDU with UK 3m Feed
IEC10VC14	10 Way IEC - C13 Vertical PDU with IEC - C14 3m Feed
IEC10V16A	10 Way IEC - C13 Vertical PDU with (16Amp) Commando 3m Feed

12 Way

IEC12V	12 Way IEC - C13 Vertical PDU with UK 3m Feed
IEC12VC14	12 Way IEC - C13 Vertical PDU with IEC - C14 3m Feed
IEC12V16A	12 Way IEC - C13 Vertical PDU with (16Amp) Commando 3m Feed

16 Way

IEC16V	16 Way IEC - C13 Vertical PDU with UK 3m Feed
IEC16VC20	16 Way IEC - C13 Vertical PDU with IEC - C20 3m Feed
IEC16V16A	16 Way IEC - C13 Vertical PDU with (16Amp) Commando 3m Feed

20 Way

IEC20V16A	20 Way IEC - C13 Vertical PDU with (16Amp) Commando 3m Feed
IEC20VC20	20 Way IEC - C13 Vertical PDU with IEC-C20 3m Feed

PART NO	DESCRIPTION

POD Desktop Power

PDP-PACK-4-1	4 x Individually Fused UK Sockets (West/North/North/East) Master PDU
PDP-PACK-4-4	4 x (5Amp) Individually Fused and Switched UK Sockets (North) PDU
PDP-PACK-DESK-6S	6 x (5Amp) Individually Fused Power Master Switch PDU
PDP-PACK-4	4 x (5Amp) Individually Fused UK Sockets (West, North, North, East) PDU
PDP-PACK-6	6 x (3.15Amp) Individually Fused UK Sockets (West, North, North, North, North, East) PDU
PDP-PACK-DESK-2S	2 x (5Amp) Individually Fused Power Master Switch PDU
PDP-PACK-DESK-2S-U	2 x (5Amp) Individually Fused Power Master Switch and 2 x USB PDU
PDP-PACK-DESK-4S	4 x (5Amp) Individually Fused Power Master Switch PDU
PDP-PACK-DESK-4S-U	4 x (5Amp) Individually Fused Power Master Switch and 2 x USB PDU
PDINTER-1G	1m GST18 Male - Female Wieland Black PVC Power Lead
PDINTER-2G	2m GST18 Male - Female Wieland Black PVC Power Lead
PDINTER-3G	3m GST18 Male - Female Wieland Black PVC Power Lead
PDSTART-1G	1m GST18 Female - UK (13Amp) Plug Wieland Black PVC Power Lead
PDSTART-2G	2m GST18 Female - UK (13Amp) Plug Wieland Black PVC Power Lead
PDSTART-3G	3m GST18 Female - UK (13Amp) Plug Wieland Black PVC Power Lead
PDSTART-4G	4m GST18 Female - UK (13Amp) Plug Wieland Black PVC Power Lead
PDSTART-5G	5m GST18 Female - UK (13Amp) Plug Wieland Black PVC Power Lead
PDSTART-6G	6m GST18 Female - UK (13Amp) Plug Wieland Black PVC Power Lead
PDSTART-10G	10m GST18 Female - UK (13Amp) Plug Wieland Black PVC Power Lead

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Inside this section...

TECH TERMS

What is **DisplayPort?**

BANDWIDTH

DP 2.0 — 80 Gbps
DP 1.3/1.4 — 32.4 Gbps
DP 1.2 — 21.6 Gbps
DP 1.1 — 10.8 Gbps

DisplayPort is a popular digital display interface used primarily to transmit video from a desktop PC to a connected monitor, but it can also carry audio and data. It was introduced to replace legacy solutions like VGA and DVI, though retains backward compatibility with these and HDMI, using adapters.

Often seen as a rival to HDMI, DisplayPort typically offers greater bandwidth, but it doesn't have the same feature set.

The first generation of DisplayPort was introduced in 2006, and it's gone through several successive generations since, though until the launch of DisplayPort 2.1, it hadn't seen any serious revisions since DisplayPort 1.3 in 2014. DisplayPort 1.4 was largely a feature upgrade, rather than a performance improvement, though is currently the most popular form of DisplayPort, and can be found on many modern graphics cards and monitors.

DisplayPort uses a non-reversible header with 20 pins. It features a locking mechanism to keep the cable in place but is also available in Mini DisplayPort form without that safety feature. However, Mini DisplayPort has largely been phased out in recent years, in favour of USB-C, which offers DisplayPort compatibility through DisplayPort Alt Mode. That's a way for USB-C cables to use the DisplayPort protocol to transmit video and audio at the same time as data to compatible displays.

DisplayPort cables support some of the highest resolutions and refresh rates possible, with DisplayPort 2.1 representing the most capable video transmission interface available today.

DisplayPort 2.1 from The Video Electronics Standards Association (VESA®) is the latest version of the DisplayPort specification, which is backward compatible whilst also updating any DisplayPort 2.0 products including DP40/DP80 cables (including both passive and active, and using full-size DisplayPort, Mini DisplayPort or USB Type-C connectors) – have already been certified to the stricter DisplayPort 2.1 spec.

Achieving a robust, end-to-end user visual experience remains the utmost priority for VESA's DisplayPort specification, whether across a native DisplayPort cable, via DisplayPort Alt Mode (DisplayPort over the USB Type-C connector) or tunnelled through the USB4 link. As such, DisplayPort 2.1 has tightened its alignment with the USB Type-C specification as well as the USB4 PHY specification to facilitate a common PHY servicing both DisplayPort and USB4. In addition, DisplayPort 2.1 has added a new DisplayPort bandwidth management feature to enable DisplayPort tunnelling to coexist with other I/O data traffic more efficiently over the USB4 link.

"Achieving greater alignment between DisplayPort and USB on a common PHY has been a particularly important effort within VESA given the significant overlap in use case models between the DisplayPort and USB4 ecosystems," "DisplayPort 2.1 brings DisplayPort into convergence with USB4 PHY specifications to ensure the highest video performance across a broad range of consumer products. Display transport through DisplayPort, with its higher bit rates and proven visual quality of DSC.

What is DisplayPort 2.1?

DisplayPort 2.1 is the latest generation of DisplayPort technology and like HDMI 2.1, it represents a major upgrade over its predecessors. Since no devices ever utilized the DisplayPort 2.0 standard, DisplayPort 2.1 is effectively the first to use all the advantages of that, with a few additional extras to better standardize the higher speed versions of DisplayPort cables, and better integrate the DisplayPort protocol with USB-C.

Transmission Mode	Certification Level	Bandwidth
RBR	DP40 or DP80	6.48 Gbps
HBR	DP40 or DP80	10.8 Gbps
HBR2	DP40 or DP80	21.6 Gbps
HBR3	DP40 or DP80	32.4 Gbps
UHBR 10	DP40 or DP80	40 Gbps
UHBR 13.5	DP80	54 Gbps
UHBR 20	DP80	80 Gbps

The major upgrade with DisplayPort 2.1 is its bandwidth. It can support total bandwidths more than three times that of DisplayPort 1.4, thanks to a trio of new transmission modes. These have been designated Ultra High Bit Rate 10 (UHBR 10), Ultra High Bit Rate 13.5 (UHBR 13.5), and Ultra High Bit Rate 20 (UHBR 20). The numerical figures denote the per-lane data rate of the connection, which in the case of DisplayPort is quadrupled across its four lanes, potentially giving DisplayPort 2.1 a maximum bandwidth of 80 Gbps. That's close to double that of HDMI 2.1 and comparable to the fastest USB4 Type-C cables.

Not every DisplayPort 2.1 cable, device, or display will support all three transmission modes but even UHBR 10 makes DisplayPort one of the most powerful video transmission cables. UHBR 10 cables and devices can handle 4K resolution at up to 144Hz, or 8K at up to 30 Hz. The higher data rates are even more impressive, hitting up to 240Hz at 4K, and even up to 85Hz at 8K. With Display Stream Compression (DSC) UHBR 20 can even handle a single 16K display at up to 60Hz, with HDR, and 10-bit colour.

At lower resolutions, the potential for higher refresh rates is exciting, too. DisplayPort 2.1 can handle 1440p at up to 500Hz, or 1080p at up to 900Hz. DisplayPort 2.1 will also be usable over USB-C and will enable the transmission of high-speed data at the same time as powering multiple 4K displays simultaneously.

The massive data rate improvement of DisplayPort 2.1 was partly down to a change in the cable's encoding system. It uses a much more efficient 128b/132b encoding, which results in much more efficient use of the available bandwidth. Ultimately giving you a usable 77.37 Gbps data rate from 80 Gbps total bandwidth.

As for features, DisplayPort 2.1 still doesn't offer anything like HDMI's ARC and eARC abilities, but it does have a new bandwidth management feature to better facilitate data and video transmission at the same time over USB-C cables, and a new testing and naming convention for higher bandwidth DP40 and DP80 cables.

DisplayPort 2.1 vs. 2.0 vs. 1.4

DisplayPort 2.1 and DisplayPort 2.0 are almost identical as far as their specifications go, but there were some slight improvements as far as integration with USB-C cables and DisplayPort alt mode. However, both standards are leaps and bounds ahead of DisplayPort 1.4.

DisplayPort 1.4 supports the four traditional DisplayPort transmission modes: Reduced Bit Rate (RBR), High Bit Rate (HBR), High Bit Rate 2 (HBR2), and High Bit Rate 3 (HBR3), with a maximum bandwidth of 32.4 Gbps. The newer DisplayPort 2.0 and 2.1 standards support the newer UHBR transmission modes, offering up to 80 Gbps of total bandwidth, or 77.37 Gbps of raw data rate.

Bandwidth

DP 2.0	**80Gbps**
DP 2.1	**80Gbps**
DP 1.3 / 1.4	**32.4Gbps**
DP 1.2	**21.6Gbps**
DP 1.1	**10.8Gbps**

80Gbps
70Gbps
60Gbps
50Gbps
40Gbps
30Gbps
20Gbps
10Gbps
0

DisplayPort

This was partly achieved through a change in encoding between the generations of cables. DisplayPort 1 through 1.4 used the older ANSI 8b/10b encoding system, where eight out of every 10 bits are data, with the final two being used for DC balancing (giving a roughly equal quantity of 1s and 0s in the transmission). That results in an efficiency of just 80%, leading to the overall 32.4 Gbps bandwidth of DisplayPort 1.4 cables being reduced to just 25.92 Gbps of total data rate.

DisplayPort 2.0 and DisplayPort 2.1 use a new 128b/132b encoding scheme that has an overall efficiency of 96.7 percent, helping it make the most of its 80 Gbps bandwidth, for a total data rate of 77.37 Gbps when using the UHBR 20 transmission mode.

All that additional bandwidth opens DisplayPort 2.1 and 2.0 to new resolutions and refresh rates. They can support 1080p at up to 900Hz, 4K at up to 240Hz, and 8K at up to 60Hz, as well as supporting HDR and 10bit colour at various resolutions and refresh rates where it wasn't possible on DisplayPort 1.4's more limited bandwidth.

Although optional, the newer DisplayPort standards can also support VESA's Panel Replay technology, which makes it possible for pixels on a display to not have to refresh if displaying the same static content. That reduces power consumption from the display when there are static elements on the screen, like logos, or heads-up display elements in games.

DisplayPort 2.1 and DisplayPort 2.0 are functionally identical, with only some minor improvements to the standardization of cable integrity with version 2.1 and new naming conventions for UHBR 13.5 and UHBR 20 cables. However, since no devices or displays have ever been released with support for DisplayPort 2.0, and DisplayPort 2.1 is now considered the modern DisplayPort standard, it seems likely that we will only ever see DisplayPort 2.1 devices and displays.

DisplayPort is Different from HDMI?

DisplayPort and HDMI are very different technically, and each began with a different product focus. For over ten years, HDMI has been the de-facto connection for home entertainment systems and is used widely on HDTVs as an AV interface. Some PCs and monitors include HDMI to enable connectivity with HDTVs and other consumer electronics gear. DisplayPort, a newer standard originally developed to support the higher performance requirements of personal computers, is based on updated signal and protocol technology similar to that already used in today's computer systems, enabling an increase in performance and integration. Because DisplayPort uses common signaling technology in use for data communications and a packetized data structure, through a common connector, it can be combined with standards such as USB and Thunderbolt. With link training/link quality monitoring as in data communications, DisplayPort provides a more robust and stable AV link.

DisplayPort 2.0 Performance to USB4™ and New USB Type-C® Devices

DisplayPort Alt Mode version 2.0 enables all of the latest capabilities of DisplayPort through the USB Type-C connector, including beyond-8K resolution and higher refresh rates, along with USB data delivery

DisplayPort Alt Mode 2.0 provides seamless interoperability with the new USB4™ specification published by the USB Implementers Forum (USB-IF), and fully enables all of the features in the latest version of the DisplayPort standard (version 2.0) through the USB Type-C® (USB-C) connector. With DisplayPort Alt Mode, the USB-C connector can transmit up to 80 Gigabits per second (Gbps) of DisplayPort video data utilizing all four high-speed lanes in the cable, or up to 40 Gbps with simultaneous SuperSpeed USB data delivery. VESA anticipates first products incorporating DisplayPort Alt Mode 2.0 to appear on the market in 2021.

DisplayPort and Thunderbolt

Thunderbolt takes advantage of DisplayPort technology, and Thunderbolt Hosts (such as notebooks and personal computers) are backward-compatible with DisplayPort cables and DisplayPort monitors. This means you can plug a DisplayPort monitor into a Thunderbolt computer output, using a standard DisplayPort cable. The adoption of DisplayPort technology by Thunderbolt has helped to accelerate the adoption of DisplayPort in high-end computing and video post-production.

TECH TERMS

DisplayPort 2.1 vs. HDMI 2.1

DisplayPort 2.1 and HDMI 2.1 are the two video and audio transmission cable standards that are set to dominate the early to mid-2020s when it comes to consumer devices. Both support ultra-high definition resolutions like 4K and 8K, and high refresh rates of 120Hz or more at 4K. That makes them well suited to supporting the latest, and next generations of desktop PCs and laptops, as well as game consoles.

However, there are some major differences between them, most notably that DisplayPort 2.1 is much more performative. Where it has a maximum data rate of 77.37 Gbps, HDMI 2.1 can only manage a usable data rate of 42 Gbps. That's still powerful enough for 4k 120Hz gaming on the Xbox Series X or PlayStation 5, but it can't do much more than that.

DisplayPort 2.1, however, can go much further, hitting up to 240Hz at 4K, and even up to 85 Hz at 8K without any kind of compression. HDMI 2.1 can use DSC to match that, but that's not ideal for gaming and other latency-sensitive tasks.

Still, HDMI 2.1 does support ARC and eARC, enabling leaner cabling on your A/V entertainment system, which DisplayPort 2.1, or any other generation of DisplayPort for that matter, cannot do. HDMI 2.1 is also widely available, on both source devices like the latest games consoles, UHD Blu-ray players, and many desktop PCs and laptops.

DisplayPort 2.1 on the other hand, is almost non-existent. At the time of writing, there are only a few source devices available that can output to DisplayPort 2.1, and only a couple of displays that can receive the signal. This is likely to change over the coming year, though. DisplayPort 2.1 will see greater support among display manufacturers and as new, more affordable graphics cards are released as part of the latest generations, we should see wider adoption of the DisplayPort 2.1 connection, too.

DVI Monitor Port

Newer computers use DVI instead of VGA. The new breed of "thin" laptops use the smaller variants of DVI like the Mini-DVI and Micro-DVI.

A DVI cable has 29 pins, though some connectors may have less pins depending on their configuration.

DVI's video signal is compatible with HDMI, so a simple converter can allow a DVI monitor to receive input from an HDMI cable.

Additionally, DVI to VGA converters are also available to connect your new graphics card to an old monitor that supports only VGA mode.

DVI-D cables are used for direct digital connections between source video and LCD monitors.

DVI-I cables are integrated cables which are capable of transmitting either a digital-to-digital signal or an analogue-to-analogue signal. This makes it a more versatile cable, being usable in either digital or analogue situations.

HDMI Cables

HDMI® 2.1b Specification

HDMI® Specification HDMI 2.1b is the most recent update of the HDMI® specification and supports a range of higher video resolutions and refresh rates including 8K60 and 4K120, and resolutions up to 10K. Dynamic HDR formats are also supported, and bandwidth capability is increased up to 48Gbps.

Supporting the 48Gbps bandwidth is the new Ultra High Speed HDMI Cable. The cable ensures ultra high-bandwidth dependent features are delivered including uncompressed 8K video with HDR. It features exceptionally low EMI (electro-magnetic interference) which reduces interference with nearby wireless devices. The cable is backwards compatible and can be used with the existing installed base of HDMI devices

The Ultra High Speed HDMI® Cable **Logo** printed on the label

The Ultra High Speed HDMI® Cable name **printed** on the cable jacket

QR code + holographic image can only be scanned by **HDMI® Cable Certification app**

The HDMI Advantage

HDMI technology is the global standard for connecting high-definition equipment. HDMI is the intelligent, all-digital interface used by most of the world's largest consumer electronics, PC and mobile device manufacturers incorporate HDMI connectivity into their products. HDMI is backwards compatible with DVI so you can use a converter to watch video on a DVI device.

There are several HDMI cable types plus a special cable certification designation to choose from; each designed to meet a particular performance standard. Here is an overview of the HDMI cable types, their capabilities, and how to tell them apart.

Active Optical HDMI Cables (AOC)

For longer length installations you will want to use a cable that supports 1.4 and 2.1 speeds, some are available with detachable heads for ways of installation through walls.

Finding the Right Cable...

The Ultra High Speed HDMI 2.1 Cable
This latest HDMI cable is the only cable that complies with stringent specifications designed to ensure support for all HDMI 2.1 features including uncompressed 8k@60 and 4K@120. The cable's bandwidth supports up to 48Gbps, it is backwards compatible with existing HDMI devices, and features exceptionally low EMI which reduces interference with nearby wireless devices. For verification and authentication the cable packaging is required to display the Ultra High Speed HDMI Certification Label which includes the Cable Name Logo printed on it.

Premium High Speed HDMI 1.4a Cable and Premium High Speed HDMI 1.4a Cable with Ethernet are special certification designations for High Speed HDMI Cables that have been designed and certified for ultra-reliable performance for 4K/UltraHD including advanced features such as 4K60, HDR, expanded color spaces including BT.2020, and 4:4:4 chroma sampling. They have low EMI and are identified by HDMI Licensing Administrator's Premium HDMI Cable Certification Label for authentication verification.

"Trust the cable with the label" - Only Premium HDMI Cables are allowed to display and promote the official Premium HDMI Cable Authentication Label.

High Speed HDMI 1.4a Cable with Ethernet
This cable type offers the same baseline performance as the High Speed HDMI Cable shown above (1080p video resolution and beyond), plus an additional, dedicated data channel, known as the HDMI Ethernet Channel, for device networking. HDMI Ethernet Channel functionality is only available if both linked devices are HDMI Ethernet Channel-enabled.

High Speed HDMI 1.4a Cable
The High Speed HDMI cable is designed and tested to handle video resolutions of 1080p and beyond, including advanced display technologies such as 4K, 3D, and Deep Color. If you are using any of these technologies, or if you are connecting your 1080p display to a 1080p content source, such as a Blu-ray Disc player, this is the recommended cable.

Standard HDMI Cable with Ethernet
This cable type offers the same baseline performance as the Standard HDMI Cable shown above (720p or 1080i video resolution), plus an additional, dedicated data channel, known as the HDMI Ethernet Channel, for device networking. HDMI Ethernet Channel functionality is only available if both linked devices are HDMI Ethernet Channel-enabled.

Standard HDMI Cable
The Standard HDMI cable is designed to handle most home applications, and is tested to reliably transmit 1080i or 720p video — the HD resolutions that are commonly associated with cable and satellite television, digital broadcast HD, and upscaling DVD players.

Thunderbolt 3

Thunderbolt is developed by Intel and Thunderbolt 3 is an incredibly powerful technology and makes connecting devices that little bit easier. supports a much wider range of data transfer. It supports data up to 40Gbps and also supports high-resolution displays and allows you to daisy-chain devices so that you only have to connect those devices to one port on your computer.

Thunderbolt 3 is essentially a hardware interface that is designed to combine a number of different transfer protocols into a single physical connector.

Thunderbolt 3 combines a number of different standards, including PCI Express 3.0, DisplayPort 1.2 and Thunderbolt at 20GBps and 40Gbps, all in one cable.

That physical connector happens to be the USB-C connector. There are some major differences between Thunderbolt 3 and USB-C. While Thunderbolt 3 is an actual data transfer protocol, USB-C is simply the type of connector that it uses. When you talk about USB-C ports, it could use a number of different protocols, including Thunderbolt 3 or USB 3.1. Put simply, Thunderbolt 3 is backwards compatible with USB-C devices, but a USB-C computer will not work with a Thunderbolt 3 device.

Thunderbolt 3's massive bandwidth, you can drive up to two 4K displays with a 60Hz refresh rate and a single Thunderbolt 3 port can transfer speeds at up to 40Gbps. To put that in perspective, an entire 4K movie can be transferred in about 30 seconds at those speeds.

Thunderbolt 3 also supports the DisplayPort 1.2 protocol, and you can connect Thunderbolt 3 ports to external displays. While it uses the DisplayPort protocol, it can easily be converted into other video ports such as HDMI, DVI, or VGA through a simple adapter. On displays that support daisy-chaining, you can even connect up to two 4K displays with a refresh rate of 60Hz through a single Thunderbolt 3 cable.

Thunderbolt 3 can transfer power too, just like USB.

Thunderbolt 4

Thunderbolt 4 is more of a consolidation and evolution but real-world performance as Intel has mandated the minimum data rate and features that OEMs need to implement. Manufacturers using Thunderbolt 4 must hit higher performance minimums, guaranteeing that all supported devices support twin 4K displays or a single 8K display. Thunderbolt 4 enhancements will make it possible to wake all hub-connected devices on touch,

Thunderbolt 4 is designed to be fully compliant with the upcoming USB4 protocol. That means that Thunderbolt 4 devices will work seamlessly with USB4 computers.

Thunderbolt 4 ports will show the small lightning bolt logo, which will help differentiate it from USB4 Type-C ports, and older USB 3.2 Type-C ports. Thunderbolt 4 cables, however, will have that same logo, but will also have a small number 4 written underneath it.

Thunderbolt 5 vs. Thunderbolt 4

Thunderbolt 4 mandated a minimum (and maximum) bandwidth of 40 Gbps of bi-directional data, Thunderbolt 5 doubles that to 80 Gbps. It also maintains up to 120 Gbps of uni-directional bandwidth, whereas Thunderbolt 4 merely offers the same 40 Gbps as its bi-directional capabilities.

This additional bandwidth opens up new display options for Thunderbolt 5 that you just can't do on Thunderbolt 4. Where Thunderbolt 4 is rated to handle dual 4K displays with limited leftover bandwidth for simultaneous data transfer, Thunderbolt 5 can manage up to three 4K displays at up to 144Hz at the same time, whilst still providing tens of gigabits of data transfer bandwidth. It is also rated to output to multiple 8K monitors simultaneously and supports ultra-high refresh rates up to 540Hz for lower resolutions, like 1080p.

Like USB4, Thunderbolt 5 will also support considerably higher power delivery for faster and more efficient charging. Where Thunderbolt 4 is limited to a mere 100W of charging power, Thunderbolt 5 will extend that to up to 240W – with a mandated minimum of 140W, when coupled with a suitable power adaptor, that will charge up some laptops in mere minutes, making Thunderbolt 5 an excellent solution for the next generation of fast chargers.

Compatibility with Other Technologies

Thunderbolt 5 is, effectively, USB4 with all of the optional extra features turned on. That means that it's entirely interchangeable and compatible with USB4 cables and USB4 ports and connections. The only caveat to that is that the connection will only run at the slowest maximum supported speed. So if you connect your new Thunderbolt 5 device, with a Thunderbolt 5 cable to a USB4 port that only supports 20 Gbps speeds, it'll all only operate at 20 Gbps.

That compatibility extends to any USB-C connection, too. That can be USB-C at USB 2.0 speeds, like in the new iPhone 15 base and Plus models, USB-C Gen 2 (like the iPhone 15 Pro models), USB-C Gen 2x2, and more recent USB4 connections at all the supported speeds. Thunderbolt 5 will work with any USB-C connection, but will likely see some restrictions if it isn't part of a chain of Thunderbolt 5 connections.

Thunderbolt 5 is one of those exciting technologies that's just over the horizon. We can see it, we know what it'll do and what it's capable of, but we can't quite use it just yet. It's likely that by the time it does become readily available towards the end of 2024 and into 2025, USB4 and other technologies will have caught up a little.

In the meantime, if you want a super high-speed connection for fast file transfers, USB4 and Thunderbolt 4 are still excellent. For high-resolution and refresh rate video transmission, HDMI 2.1 and DisplayPort 2.1 are also fantastic alternatives.

USB-C vs Thunderbolt 3

USB-C (formally known as USB Type-C) and Thunderbolt 3 describe different things. USB-C is, by itself, just a form-factor for a connection. USB-C is an evolution of the design of older boxy USB connectors (known as Type-A). USB-C is a reversible connector, which means no more fiddling when plugging it in. It also has more pins than USB-A, allowing for increased power delivery, data transfer speeds, and video bandwidth to travel across the cable.

The term "USB-C" is used in the product description, it should be seen as shorthand for "a USB port that uses the Type-C form factor."

Thunderbolt 3, by contrast, refers to specifications detailing transfer speeds, data bandwidth, and more. The take-home message is to remember that TB3 uses a USB-C connector but offers additional features over the USB protocol.

When discussing USB-C vs. Thunderbolt 3, it is important to note that both connections share quite a bit in common. Both use the Type-C form factor for the connection. Both USB-C and TB3 can be used to power devices, transfer data at high speeds, and connect a variety of peripherals including displays. Both can be used to connect a computer to a compatible docking station, which you may want to use.

There are noticeable differences between the two standards. The key differences between USB-C and TB3 can be boiled down to three main points: data transfer rates, display connections, and connecting external devices.

1. **Data transfer:** Thunderbolt 3 is significantly faster than USB-C. USB-C supports transfer speeds ranging from 480 Mbps (USB 2.0) to 20 Gbps (USB 3.2 Gen 2x2); 10 Gbps is the most common speed. Thunderbolt 3 supports transfer rates up to 40 Gbps.

2. **Display connections:** One of the big draws of Thunderbolt 3 is its versatility. In addition to offering blazingly fast transfer speeds, Thunderbolt 3 has the bandwidth to drive up to two 4K monitors at 60 Hz. USB-C can also support external displays with the optional "DisplayPort Alternate Mode" feature. Without this feature, displays will not work when connected via USB-C. Verify that your computer supports this feature if you intend to use an external display over USB-C.

3. **Device support:** Both be used to connect a variety of peripherals such as printers and hard drives. Thunderbolt 3 supports PCIe devices like external GPUs and fast external hard drives. USB-C cannot connect to these kinds of devices.

4. **Daisy-chaining:** Thunderbolt 3 supports daisy-chaining. Up to 6 compatible devices can be connected in a chain using their own ports instead of connecting to the host device. With USB-C, these devices would all need to connect to individual host USB-C ports.

5. **Backward compatibility:** Thunderbolt 3 B3 is compatible with USB-C. If a USB-C device is plugged into a Thunderbolt port, the port reverts to USB-C mode to support the device. Compatibility is not reciprocal, however. A USB-C only port will not work with a Thunderbolt 3 device.

USB-C will meet the needs of most people. However, there are specific use cases where Thunderbolt 3 is advantageous (or even necessary). Faster data transfer speeds (40 Gbps vs. 10-20 Gbps), support for two high-resolution displays, and the ability to connect devices like external GPUs are only available via Thunderbolt 3.

Keep in mind that Thunderbolt 3 is a proprietary connection, the copyright of which is owned by Intel. As such, Thunderbolt 3 often comes at a price over USB-C. If work does not demand data-hungry peripherals, USB-C is a flexible and cost-effective option for most users.

USB4 vs Thunderbolt 4

USB 4 and Thunderbolt 4 are functionally almost identical support.

Thunderbolt 4 and USB4 cables will be entirely interchangeable, and will be backward compatible. Thunderbolt 3 cables will also work with Thunderbolt 4 and USB4 connections. Older USB-C 3.2 connections will work with USB4 connections, but won't be able to offer the fastest 40 Gbps transfer speeds.

USB4 and Thunderbolt 4 both support power delivery up to 100W, making it possible to charge almost any supporting device using the connection. More importantly, though, where older USB-C 3.2 devices did not have to support the higher wattage options of USB Power Delivery, USB4 certified devices must to qualify. That means that any USB4 or Thunderbolt 4 port will be able to charge any USB4 compatible device at full power delivery for the fastest charging.

USB Cables

The Future of Connectivity –
Unraveling the potential of USB-C

Welcome to a world where physical and digital boundaries are blending, where the pace of technological advancement is astonishing, and where the power to create, collaborate, and engage is at our fingertips - welcome to the world of USB-C connectivity.

Here at Cablenet, we firmly believe that technology should enhance human potential, empower individuals, and enable seamless collaboration, irrespective of distance or device. As audio-visual experts on the frontline of technological innovation, we strive to develop solutions that break down walls and bridge gaps and creating, fostering engaging, inclusive, and connected experiences.

USB-C is more than just a connector

USB-C is a game-changer that's redefining the way we transfer data, power our devices, and ultimately, connect with each other. From lightning-fast data transfers to versatile power delivery, USB-C is rapidly becoming the new standard, simplifying and enhancing the way we interact with our devices. But, as with any significant advancement, it also brings new challenges, complexities, and considerations.

These pages will guide you through the exciting world of USB-C, unraveling its potential, explaining its unique features, and showcasing the innovative solutions Cablenet has developed to address its challenges. Whether you're a system integrator seeking efficient, high-quality solutions for your customers, an enterprise aiming for more seamless collaboration, or an educational institution looking to foster a more immersive learning experience, understanding USB-C can help you harness the power of this revolutionary technology.

Join us on this journey into the future of connectivity, where we strive to create audio-visual experiences that are more engaging, more inclusive, and more connected than ever before.

The Evolution of USB Technology

The Universal Serial Bus (USB) has come a long way since its inception in the mid-90s. In this section, we trace the path from the humble USB 1.0, with its modest speed of 1.5 Mbps, through the transformative USB 3.0, to the revolutionary USB-C. We'll explore how each iteration has expanded the horizon of possibilities for data transfer and device connectivity.

A quick look at the past: from USB 1.0 to USB 3.0

USB 1.0 was launched in 1996, offering a data transfer rate of 12 Mbps and was predominantly used for connecting keyboards and mice. With USB 2.0 in 2000, the data transfer rates dramatically increased to 480 Mbps, expanding its usability to high-speed devices like hard drives and video devices. USB 3.0 arrived in 2008, boasting a significant increase in data transfer rates up to 5 Gbps, and later 3.1 and 3.2 versions pushed this speed even further to 10 Gbps and 20 Gbps, respectively. These advances were impressive but were also paired with an array of connectors — Type-A, Type-B, Mini USB, and Micro USB — that caused compatibility and user experience issues.

1996-2000
USB 1 to USB 1.1
1.5 Mbit/s to 12 Mbit/s
Low speed
Large connectors

2000-2008
USB 2.0
480 Mbit/s
Introduction of the micro & mini connections
OTG Support
Battery charging support
Supported on USB-C connector

2008-2013-2017
USB 3.0 – USB 3.1
5 Gbit/s – 10 Gbit/s
5 additional superspeed pins
Supported on USB-C connector

2017-2019
USB 3.2 Gen 2x2
20 Gbit/s
Requires USB-C connector

2019-2022
USB 4
40 Gbit/s
Requires USB-C connector

The Birth of USB-C

In 2014, USB-C was introduced as a revolutionary connector that would unify the array of USB types. But its introduction was not only about simplifying the physical design—it also heralded a leap in the technological prowess of USB standards.

USB-C brought about improvements in data transfer speeds, supporting up to 10 Gbps with USB 3.2 and potentially up to 20 Gbps with USB 3 Gen 2x2. However, it's the added capabilities that truly make USB-C a game-changer.

1996

USB 1
1.5 Mbps

61 days 17 hours
31 minutes 12 seconds

2022

USB 4
40 Gbps

200 seconds

=

2.6 million % increase in bandwidth

1 **Power delivery:** USB-C can deliver power up to 240W, enabling it to charge not just phones and tablets, but also laptops and other power-hungry devices.

2 **Reversible connector:** USB-C eliminates the guesswork of "which way is up?" with its user-friendly reversible design.

3 **Bi-directional power:** This feature allows USB-C to send and receive power, making it possible to charge your device and power other devices simultaneously.

4 **Alternate modes:** USB-C supports video transfer, which means it can output different types of signals, including DisplayPort, HDMI, and even Thunderbolt 3, for high-speed data transfer and highresolution displays.

Understanding USB-C

USB-C isn't just another connector; it's a revolution in design and functionality. It's a small, reversible connector designed to support a variety of different protocols, allowing it to perform multiple roles with just one cable. In this section, we will delve into the advantages of USB-C, its design, data transfer speed, power delivery, and more.

Universal compatibility:
One of the key benefits of USB-C is its universality. As it gains widespread acceptance, more and more devices—from laptops and smartphones to peripherals and advanced AV equipment—are incorporating USB-C ports. This means fewer cables to carry around, and the ability to charge a wide range of devices from a single power source, or connect them to a single data source.

Audio-Visual prowess:
USB-C isn't just about data and power. It's equally comfortable dealing with audio and video, thanks to the compatibility with standards like Thunderbolt 3 and DisplayPort. For professionals in the audiovisual sector, this allows the transmission of high-quality, low-latency audio and video signals through a single cable, simplifying setup and enhancing performance.

Easier connection:
The days of fumbling with your USB cable, trying to figure out which side is "up," are over. The USB-C connector is reversible, meaning it can be plugged in either way, making connections much easier and faster, and reducing the risk of port or cable damage due to incorrect insertion.

Power delivery:
Beyond just charging your devices, USB-C's power delivery is intelligent. It allows power output over Power Delivery protocol (PD), meaning it can deliver just the right amount of power needed for the device it's connected to. This makes charging safer and more energyefficient.

Interface with AV peripherals:
Beyond basic peripherals like keyboards and mice, USB-C connects with advanced AV tools such as cameras, soundbars, and UCC peripherals. These devices transform audio and video into data, transmitted seamlessly via USB-C cables. This key feature elevates USB-C's role, making it an essential component in modern digital communication setups.

Each of these benefits contributes to making USB-C not just a connector, but a facilitator of simplified, efficient, and effective digital interaction.

USB Type-C Market Size (2023)	2351.9 million units
Sales Forecast (2033)	19,570.57 million units
Global Market Growth Rate (2023 to 2033)	23.6% CAGR

(credit: https://www.futuremarketinsights.com/reports/usb-type-c-market)

HDMI & USB-C: complementary tools in your connectivity arsenal

HDMI and USB-C are two pivotal interfaces in modern connectivity landscapes. Both have unique strengths and differentiating specifications that determine their ideal use cases. Understanding their technical differences will help you leverage these technologies in your audio-visual setups most effectively. In this section, we present a comparison rooted in technical data to help you see HDMI and USB-C as complementary tools in your connectivity arsenal.

Connectivity and versatility

HDMI has been the go-to standard for transmitting high-definition audio and video data for many years. It supports various formats, including 720p, 1080p, 4K, 8K, and even up to 10K resolution with the latest HDMI 2.1 version, as well as uncompressed 7.1 linear PCM audio.

In contrast, USB-C serves a broader range of applications. The USB-C interface, coupled with USB 3.2 Gen 2x2 or USB4 standards, can carry data at rates up to 20 Gbps and 40 Gbps respectively. This is more than just AV data; it includes general data and power, all over a single connection, reducing cable clutter and simplifying installations.

Data transmission and power

While HDMI 2.1 can deliver a bandwidth of 48 Gbps, suitable for high-definition audio and video, USB-C has the potential for even higher data transfer rates. USB4 with USB-C connectors can reach up to 40 Gbps, doubling the capacity of previous USB versions.

In terms of power delivery, USB-C stands out with its ability to deliver up to 100W of power, allowing it to charge devices like laptops and tablets over the same connection. HDMI does not have this functionality, as it focuses primarily on AV data transmission.

USB Power Delivery Specification Revision 3.1
Specification defines delivering up to 240W of power over USB Type-C®

The release of the USB Power Delivery (USB PD) Revision 3.1 specification, a major update to enable delivering up to 240W of power over the USB Type-C® cable and connector. Prior to this update, USB PD was limited to 100W via a solution based on 20V using USB Type-C cables rated at 5A. The USB Type-C specification has also been updated with Release 2.1 to define 240W cable requirements, and with the updated USB PD protocol and power supply definition, this extends the applicability of USB PD to a large number of applications where 100W wasn't adequate.

The new USB PD architecture defines a much more stringent power negotiation protocol that helps to ensure that access to and use of this higher power capability can be done safely. It should be noted that safety requirements for products that use power in the range of 100 – 240W are also more stringent than lower power products and are defined by the applicable safety specifications dictated by the regulations for each country where the products will be sold.

Key characteristics of the USB PD 3.1 specification include:

- A choice of three new fixed voltages: 28V (above 100W), 36V (above 140W) and 48V (above 180W) joining previously defined 5V, 9V, 15V and 20V fixed voltages.

- A new adjustable voltage mode enabling a range from 15V to one of three maximum voltages (28V, 36V, or 48V) depending on the available power allowing the device being powered to request specific voltages to a 100 mV resolution

Now, the various USB specifications are defined by their speed. Charging specifications are defined by their wattage, with logos that actually indicate this.

LOGO NAME	PACKAGING LOGO
Certified USB Charger	
Certified USB Fast Charger	

The USB-IF's new charger logos.

USB4® Version 2.0

Specification defines delivering up to 80 Gbps over USB Type-C®

USB4® Version 2.0 specification, a major update to enable USB 80Gbps performance over the USB Type-C® cable and connector. The updated USB4 specification doubles the maximum aggregate bandwidth of USB to the benefit of higher-performance displays, storage, and USB-based hubs and docks. The USB Type-C and USB Power Delivery (USB PD) specifications have also been updated to support this higher level of data performance.

Key characteristics of the updated USB 80Gbps solution include:

- Up to 80Gbps operation, utilizing a new physical layer architecture based on PAM3 signal encoding, over existing 40Gbps USB Type-C passive cables and newly defined 80Gbps USB Type-C active cables.
  - *Optionally for certain applications, such as driving very-high performance USB4-based displays, the USB Type-C signal interface can be configured asymmetrically to deliver up to 120Gbps in one direction while retaining 40Gbps in the other direction.*
- Backward compatibility with all previous versions of USB.

The New Logos for USB-C Cables

LOGO NAME	PACKAGING LOGO		CABLE LOGO	
USB 40Gbps Cable	CERTIFIED USB 40Gbps 240w	CERTIFIED USB 40Gbps 60w	40Gbps 240w	40Gbps 60w
USB 20Gbps Cable	CERTIFIED USB 20Gbps 240w	CERTIFIED USB 20Gbps 60w	20Gbps 240w	20Gbps 60w
USB 5Gbps Cable	CERTIFIED USB 5Gbps 240w	CERTIFIED USB 5Gbps 60w	5Gbps 240w	5Gbps 60w
Hi-Speed USB Cable	CERTIFIED USB 240w	CERTIFIED USB 60w	240w	60w

USB-IF Compliance Program

The Universal Serial Bus (USB) specification defines the product design targets at the level of interfaces and mechanisms. To complement the specification and enable measurement of compliance in real products, the USB-IF has instituted a Compliance Program that provides reasonable measures of acceptability. The Compliance Program uses multiple test specifications along with a Test ID (TID) to track and define the test criteria used to evaluate a product. Products that pass this level of acceptability are considered USB-IF certified and are added to the Integrator's List and have the right to license the USB-IF Logos.

About the USB-IF The non-profit USB Implementers Forum, Inc. was formed to provide a support organization and forum for the advancement and adoption of USB technology as defined in the USB specifications. The USB-IF facilitates the development of high-quality compatible USB devices through its logo and compliance program, and promotes the benefits of USB and the quality of products that have passed compliance testing. Further information, including postings of the most recent product and technology announcements, is available by visiting the USB-IF website at **www.usb.org**

	LOGO NAME	DATA TRANSFER ONLY	AUDIO	VIDEO	POWER DELIVERY
⟜	USB 2.0 HighSpeed	✓			
SS⟜5	USB 3.2 Gen 1 SuperSpeed 5Gbps	✓	✓	✓	
SS⟜10	USB 3.2 Gen 2 SuperSpeed 10Gbps	✓	✓	✓	
SS⟜20	USB 3.2 Gen 2x2 SuperSpeed 20Gbps	✓	✓	✓	
SS⟜5™	USB 3.2 Gen 2 SuperSpeed 5Gbps Power Delivery	✓	✓	✓	✓
SS⟜10™	USB 3.2 Gen 2 SuperSpeed 10Gbps Power Delivery	✓	✓	✓	✓
20⟜	USB4 20Gbps	✓	✓	✓	✓
40⟜	USB4 40Gbps	✓	✓	✓	✓

USB3.1c Cable

A new connector has arrived for computers, peripherals, and mobile devices, the USB-C connector. Also known as USB Type-C, it's much more than just USB. Unlike its predecessors, the USB-C connector offers an array of benefits:

- **Supports multiple technologies** to accommodate Alternate Modes. The Alt Mode spec allows for DisplayPort, HDMI, and Thunderbolt 3 protocols to be transferred over a USB connection.
- **Powers and charges your laptop.** USB-C can deliver up to 100W of power making it perfect for tablets and laptops. Bandwidths of 10Gbps using USB 3.1 and 40Gbps using Thunderbolt 3

The USB-C cable head is smaller than before, and looks a bit like a Micro-USB connector.

Eventually this is the USB connector you'll use with your devices instead of using your existing USB-A, Micro-B, USB-Mini or Lightning cable. Many popular laptops and phones have already switched to, or added USB-C ports.

Use an Existing Port

If you have a spare video or USB 3.0 port, it's easy and inexpensive to connect your computer to another monitor.

I WANT TO CONNECT TO

MY COMPUTER HAS THIS PORT	VGA	DVI	HDMI	DisplayPort
Mini DisplayPort	WAV-003	WAV-001	WAV-002	–
DisplayPort	24-0204	24-0205	24-0208	32-2422A
HDMI	24-0209	32-3750	32-3632	–
Micro HDMI	–	–	32-3646	–
Mini HDMI	–	–	32-3640	–
USB 3.0	24-0304	24-0303	24-0306	24-0307

USB Cables and Connectors

You can use USB cables to:

- connect most new devices to your computer
- connect computer accessories like mice, keyboards, etc
- charge a variety of gadgets including mobile phones
- transfer data

How to recognize USB Cables

- The standard USB connector, USB-A, is a rectangular connector.
  - The USB-A end is present on every USB cable as it is the end that connects to your computer.
- The other end of the USB cable may have different connectors including:
  - USB-B; commonly used with printers, external hard drives, and larger devices
  - Mini-USB and Micro-USB; commonly used with portable devices
  - USB Male to Female connectors for extending the length of a USB cable.

5-PIN MINI USB CABLE

4-PIN MICRO USB-B CABLE

USB MALE-FEMALE EXTENSION

USB A/B CABLE

VGA

One of the most common video connectors for computer monitors and high-definition TVs is the VGA cable. You may also use a VGA cable to connect your laptop to a TV screen or a projector.

Converter cables are available to let VGA monitors connect to newer computers that only output HDMI or DVI signals.

VGA TO S-VIDEO AND RCA

VGA CABLE

VGA TO DVI /HDMI

Coaxial Cable

Coaxial cable is an electrical cable which transmits radio frequency (RF) signals and are often referred to as RG Cable, which vary by gauge and impedance. The data is carried in the centre conductor called the dielectric, while the surrounding layers of shielding stop any signal loss (also called attenuation loss) and help reduce EMI. There are two main types of coaxial cables with an impedance of 50 Ohm (Ω) 75 50 Ohm. Cables with 75 Ohm are mostly used for video signals, while 50 Ohm cables tend to be used for data and wireless communications. There are also URM & LMR versions available.

Popular types are:

Coaxial Cable Type	Outside Diameter
RG-58	4.95mm
RG-59	6.15mm
RG-6	6.90mm
RG-62	6.15mm
RG-11	10.30mm
RG-12	14.10mm
RG-213	10.30mm

Coaxial Cable Connector Types

Coaxial cable connectors have two distinct connector styles male and female. Male connectors have metals pin which protrude from the centre and female connectors have a recessed hole to receive the pin. The most popular type is BNC, Bayonet Neil-Concelman, BNC are used for quick connection or disconnection in RF equipment, test instruments, radio, television, and video signal.

HDBaseT

HDBaseT is a connectivity standard for distribution of uncompressed HD multimedia content. HDBaseT technology converges full HD digital video, audio, 100BaseT Ethernet, power over cable, and various control signals through a single LAN cable. This is referred to as 5Play™, a feature set that sets HDBaseT technology above the current standard.

HDBaseT Architecture

HDBaseT sends video, audio, Ethernet, and control from the source to the display, but only transfers 100Mb of data from display to source (Ethernet and control data). The asymmetric nature of HDBaseT is based on a digital signal processing (DSP) engine and an application front end (AFE) architecture.

HDBaseT uses a proprietary version of Pulse Amplitude Modulation (PAM) technology, where digital data is represented as a coding scheme using different levels of DC voltage at high rates. This special coding provides a better transfer quality to some kinds of data without the need to "pay" the protecting overhead for the video content, which consumes most of the bandwidth. HDBaseT PAM technology enables the 5Play feature-set to be maintained over a single 330-foot (100 m) CAT cable without the electrical characteristics of the wire affecting performance.

HDMI Connector Standards

High-Definition Multimedia Interface (HDMI) was the first digital interface to combine uncompressed high-definition video, up to eight channels of uncompressed digital audio, and intelligent format and command data in a single cable. HDMI is the de facto standard for consumer electronics. HDMI is backward compatible with DVI. Buy only tested cables with the HDMI logo. This guarantees the cable will perform to specification especially because there is no maximum length specified in the HDMI standard. And because longer lengths require a larger cable, HDMI cables usually have 24–28 AWG copper conductors. For 1080p, Deep Color, or 3D content, choose High-Speed HDMI cables.

AV over IP Distribution

IP-based distribution technologies use transmitters and receivers to extend signals over a TCP/IP network (a LAN or even a WAN, for instance). Oftentimes, they're called IP streamers when used with codecs. But, when choosing one, be sure you're not looking at the consumer-grade devices for streaming video in small office applications; be sure it's a professional-grade multicasting product.

These sophisticated extenders use CATx cabling infrastructure, but in comparison to standard non-networked CATx extenders, they multicast data over an active Ethernet network. They do this by packetizing media streams for delivery over an IP-based network, so source content can be delivered anywhere you have Ethernet wiring.

HDMI Connector

The HDMI connector is compact and is somewhat similar to a USB connector. Use this serial interface to connect audio/video equipment, such as DVD players, a set-top box and A/V receivers with an audio and/or video monitor, such as digital TV over a single cable. HDMI works with standard, enhanced, and high-definition video. It has a bandwidth from 10.2 Gigabytes so it supports all HDTV standards and has bandwidth to spare for future applications. What's more, HDMI is backward compatible with DVI equipment, such as PC's, TV's and other electronic devices using the DVI standard. The DVI device simply ignores the extra data.

What is HDMI Distribution?

HDMI distribution is achieved by AV devices, such as extenders, switches or matrices, that accept a single input signal and distribute the same signal to multiple isolated outputs and/or destinations without ground loops or signal degradation. They are used for a number of common engineering tasks, including multiple amplification, cable television, splitting monitor and front of house mixes, and "tapping" a signal prior to sending it through effects units to preserve a "dry" signal for later experimentation.

HDMI Connector Types

There are multiple different types of HDMI cable connectors sold on today's market. Although they all essentially do the same thing, they're not usually interchangeable in any specific application or device. In other words, you'll need to know which connector type you're going to be using before making a purchase.

There are currently five standard connector types available for HDMI cables, namely:
- Type A (standard)
- Type B (dual link - not currently used in any mainstream consumer products)
- Type C (mini)
- Type D (micro)
- Type E (the Automotive Connection System, chiefly developed for in-vehicle use)

These various HDMI cable connector types are easy enough to identify physically, due to their noticeably different sizes. However, if you're not familiar with the naming schemes for HDMI subtypes, then the range of available options can look a little confusing at first glance. Rest assured that, for the vast majority of home and workplace applications, HDMI connector types A, C and D (standard, mini and micro) will be the only versions you'll generally need.

Computer Cables, AV & Security

PART NO	DESCRIPTION

DisplayPort Cables & Adaptors

DisplayPort 2.1 Male 40Gbps

24-1410	0.5m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 40 (40Gbps) (8K@120Hz, 4K@240Hz) Black
24-1411	1m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 40 (40Gbps) (8K@120Hz, 4K@240Hz) Black
24-1412	1.2m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 40 (40Gbps) (8K@120Hz, 4K@240Hz) Black
24-1413	1.5m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 40 (40Gbps) (8K@120Hz, 4K@240Hz) Black
24-1414	1.8mDisplayPort Male 2.1 - DisplayPort Male 2.1 DP 40 (40Gbps) (8K@120Hz, 4K@240Hz) Black
24-1415	2m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 40 (40Gbps) (8K@120Hz, 4K@240Hz) Black

DisplayPort 2.1 Male 80Gbps

24-1420	0.3m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 80 (80Gbps) (8K@120Hz, 4K@240Hz) Black
24-1421	0.5 DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 80 (80Gbps) (8K@120Hz, 4K@240Hz) Black
24-1422	0.8m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 80 (80Gbps) (8K@120Hz, 4K@240Hz) Black
24-1423	1m DisplayPort Male 2.1 - DisplayPort Male 2.1 DP 80 (80Gbps) (8K@120Hz, 4K@240Hz) Black

DisplayPort 1.4 Male - DisplayPort Male 1.4 8K@60Hz, 4K@120Hz Black

24-1401	1m Premuim DisplayPort Male 1.4 - DisplayPort Male 1.4 (8K@60Hz, 4K@120Hz) Black
24-1402	2m Premuim DisplayPort Male 1.4 - DisplayPort Male 1.4 (8K@60Hz, 4K@120Hz) Black
24-1403	3m Premuim DisplayPort Male 1.4 - DisplayPort Male 1.4 (8K@60Hz, 4K@120Hz) Black
24-1405	5m Premium DisplayPort Male 1.4 - DisplayPort Male 1.4 (8K@60Hz, 4K@120Hz) Black

PART NO	DESCRIPTION

DisplayPort 1.4 Male - Male 1.4 AOC Active Optical LSOH Cable

32-3730	10m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable
32-3731	15m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable
32-3732	20m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable
32-3733	30m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable

DisplayPort Male 1.2 - DisplayPort Male 1.2 (4Kx2K@60Hz) Black

32-2421A	1m DisplayPort Male 1.2 - DisplayPort Male 1.2 (4Kx2K@60Hz) Black PVC Cable
32-2422A	2m DisplayPort Male 1.2 - DisplayPort Male 1.2 (4Kx2K@60Hz) Black PVC Cable
32-2423A	3m DisplayPort Male 1.2 - DisplayPort Male 1.2 (4Kx2K@60Hz) Black PVC Cable
32-2425A	5m DisplayPort Male 1.2 - DisplayPort Male 1.2 (4Kx2K@60Hz) Black PVC Cable

DisplayPort Male 1.2 - DVI-D Male 1080p Uni-D Black

24-0211	1m DisplayPort Male 1.2 - DVI-D Male 1080p Uni-D Black Cable
24-0206	2m DisplayPort Male 1.2 - DVI-D Male 1080p Uni-D Black Cable
24-0207	3m DisplayPort Male 1.2 - DVI-D Male 1080p Uni-D Black Cable

DisplayPort Male 1.2 - HDMI 1.4b 1080p 60Hz Uni-D Black Cable

24-0215	1m DisplayPort Male 1.2 - HDMI 1.3 1080p 60Hz Uni-D Black Cable
24-0216	2m DisplayPort Male 1.2 - HDMI 1.3 1080p 60Hz Uni-D Black Cable
24-0222	2m Active DisplayPort Male 1.3 - HDMI 1.4b Male (4Kx2K@60Hz) Black Cable
24-0217	3m DisplayPort Male 1.2 - HDMI 1.3 1080p 60Hz Uni-D Black Cable
24-0218	5m DisplayPort Male 1.2 - HDMI 1.3 1080p 60Hz Uni-D Black Cable

DisplayPort 1.2 Male - SVGA HD15 Male 1080i Black Cable

32-2151	1m DisplayPort Male 1.2 - SVGA HD15 Male 1080i Black PVC Cable
32-2152	2m DisplayPort Male 1.2 - SVGA HD15 Male 1080i Black PVC Cable
32-2153	3m DisplayPort Male 1.2 - SVGA HD15 Male 1080i Black PVC Cable

DisplayPort 1.2 Male - Mini DisplayPort Male (4Kx2K@60Hz) White Cable

32-2411A	1m DisplayPort Male 1.2 - Mini DisplayPort Male (4Kx2K@60Hz) White PVC Cable
32-2412A	2m DisplayPort Male 1.2 - Mini DisplayPort Male (4Kx2K@60Hz) White PVC Cable
32-2413A	3m DisplayPort Male 1.2 - Mini DisplayPort Male (4Kx2K@60Hz) White PVC Cable

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DisplayPort Cables & Adaptors | DVI Cables & Adaptors

Computer Cables, AV & Security

PART NO	DESCRIPTION

DisplayPort 1.2 Male - USB3.1c

40-4020	1m DisplayPort Male 1.2 - USB 3.1c Male (4Kx2K@60Hz) Black Cable
40-4021	2m DisplayPort Male 1.2 - USB 3.1c Male (4Kx2K@60Hz) Black Cable

DisplayPort Adaptors

24-0313	USB 3.1c Male 3-in-1 MST Splitter Adaptor
24-0314	3-in-1 DisplayPort MST Splitter Adaptor (Input 1 HDMI + 2 DisplayPort)
24-0315	3-in-1 DisplayPort MST Splitter Adaptor (Input 3 x DisplayPort)
24-0196	15cm Active DisplayPort Male 1.2 - HDMI 1.4b (4Kx2K@30Hz) Black Adaptor
24-0200	DisplayPort Male 1.2 - HDMI 1.3 1080p 60Hz Black Adaptor
24-0201	DisplayPort Male 1.2 - DVI 1080p 60Hz Black Adaptor
24-0204	15cm DisplayPort Male 1.2 - SVGA 1080p 60Hz Black Adaptor
24-0205	15cm DisplayPort Male 1.2 - DVI 1080p 60Hz Black Adaptor
24-0208	15cm DisplayPort Male 1.2 - HDMI 1.3 1080p 60Hz Black Adaptor
HCIFP-82	20cm 4K DisplayPort Female Lead - 25mm x 50mm DisplayPort Female Adaptor
24-0307A	20cm DisplayPort Female 1.2 (4Kx2K@60Hz) - USB 3.1c Male Black Active Adaptor

Mini DisplayPort Male - HDMI 1.3b Male 1080p White Cable

32-2401	1m Mini DisplayPort Male - HDMI 1.3 Male 1080p White PVC Cable
32-2402	2m Mini DisplayPort Male - HDMI 1.3 Male 1080p White PVC Cable
32-2403	3m Mini DisplayPort Male - HDMI 1.3 Male 1080p White PVC Cable

Mini DisplayPort Male - DVI 24+1 Male 1080p White Cable

32-2404	1m Mini DisplayPort Male - DVI 24+1 Male 1080p White PVC Cable
32-2405	2m Mini DisplayPort Male - DVI 24+1 Male 1080p White PVC Cable
32-2406	3m Mini DisplayPort Male - DVI 24+1 Male 1080p White PVC Cable

Mini DisplayPort Male 1.1 - SVGA HD15 Male 1080i Black Cable

32-2408	2m Mini DisplayPort Male 1.1 - SVGA HD15 Male 1080i Black PVC Cable

Mini DisplayPort Male - Mini DisplayPort Male 4K White Cable

32-2414A	0.5m Mini DisplayPort Male - Mini DisplayPort Male 4K White PVC Cable
32-2415A	1m Mini DisplayPort Male - Mini DisplayPort Male 4K White PVC Cable
32-2416A	2m Mini DisplayPort Male - Mini DisplayPort Male 4K White PVC Cable

Mini DisplayPort Adaptors

WAV-001	20cm Mini DisplayPort Male - DVI Female 1080p 60Hz White Adaptor
WAV-002	20cm Mini DisplayPort Male - HDMI 1.3 1080p 60Hz White Adaptor
WAV-003	20cm Active Mini DisplayPort Male - VGA 1080p 60Hz White Adaptor
WAV-004	20cm Mini DisplayPort Male - HDMI 1.4b (4Kx2K@30Hz) White Adaptor
WAV-006	20cm Active Mini DisplayPort Male - HDMI 1.4b (4Kx2K@60Hz) White Adaptor

PART NO	DESCRIPTION

DVI Cables & Adaptors

DVI-D 24+1 Dual Link 1080p Gold Male - Male 30AWG Black Cable

32-2799	1m DVI-D 24+1 Dual Link 1080p Gold Male - Male 30AWG Black PVC Cable
32-2800	2m DVI-D 24+1 Dual Link 1080p Gold Male - Male 30AWG Black PVC Cable
32-2801	3m DVI-D 24+1 Dual Link 1080p Gold Male - Male 30AWG Black PVC Cable
32-2802	5m DVI-D 24+1 Dual Link 1080p Gold Male - Male 30AWG Black PVC Cable
32-2803	10m DVI-D 24+1 Dual Link 1080p Gold Male - Male 28AWG Black PVC Cable

DVI-D 18+1 Single Link 1080p Male - Male 30AWG Black Cable

32-2806	3m DVI-D 18+1 Single Link 1080p Male - Male 30AWG Black PVC Cable
32-2807	5m DVI-D 18+1 Single Link 1080p Male - Male 30AWG Black PVC Cable
32-2808	10m DVI-D 18+1 Single Link 1080p Male - Male 28AWG Black PVC Cable

DVI-D Male 1080p 24+1 - Gold HDMI 1.4b Male Black Cable

32-3749	1m DVI-D Male 1080p 24+1 30AWG - Gold HDMI 1.4b Male Black Cable
32-3750	2m DVI-D Male 1080p 24+1 30AWG - Gold HDMI 1.4b Male Black Cable
32-3752	3m DVI-D Male 1080p 24+1 30AWG - Gold HDMI 1.4b Male Black Cable
32-3753	5m DVI-D Male 1080p 24+1 30AWG - Gold HDMI 1.4b Male Black Cable

DVI 24+1 (4K@30Hz) Male - USB 3.1c Male Black Cable

40-4033	2m DVI 24+1 (4K@30Hz) Male - USB 3.1c Male Black Cable

DVI Adaptors

24-0286	15cm DVI & USB 3.0 - USB 3.1c with PD Function (Power Delivery) Adaptor
24-0295	15cm DVI, HDMI and VGA - USB 3.1c Adaptor
24-0303	20cm DVI Female (4Kx2K@30Hz) - USB 3.1c Male Tailed Active Adaptor
DVI-20	DVI-I Female - Female (Gold) 24+5 Dual Link Black Adaptor
HDMIF-DVIM	HDMI 1.4b Female DVI-D - Male DVI-D 24+1 Dual Link Black Adaptor
HDMIS343	DVI-D Female - HDMI 1.4b Male Black Adaptor

3 Way DisplayPort MST Splitters

24-0313	3 Way DisplayPort MST Splitter - 2 x DisplayPort, 1 x HDMI
24-0315	3 Way DisplayPort MST Splitter - 3 x Display Port

Computer Cables, AV & Security

HDMI Cables

PART NO	DESCRIPTION

HDMI Cables

This latest HDMI cable is the only cable that complies with stringent specifications designed to ensure support for all HDMI 2.1 features including uncompressed 8k@60 and 4K@120.

Ultra High Speed 2.1 8K@60Hz & 4K@120Hz Ethernet HDMI Cable

32-3760	0.5m Ultra High Speed 2.1 Male-Male (8K@60Hz & 4K@120Hz)+Ethernet 30AWG Black PVC Cable
32-3761	1m Ultra High Speed 2.1 Male-Male (8K@60Hz & 4K@120Hz)+Ethernet 30AWG Black PVC Cable
32-3762	2m Ultra High Speed 2.1 Male-Male (8K@60Hz & 4K@120Hz)+Ethernet 30AWG Black PVC Cable
32-3763	3m Ultra High Speed 2.1 Male-Male (8K@60Hz & 4K@120Hz)+Ethernet 30AWG Black PVC Cable
32-3765	5m Ultra High Speed 2.1 Male-Male (8K@60Hz & 4K@120Hz)+Ethernet 30AWG Black PVC Cable

Ultra Premium+ 2.1 8K@60Hz & 4K@120Hz Ethernet HDMI Cable

32-3761MB	1m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Black Braid 30AWG Cable
32-3762MB	2m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Black Braid 30AWG Cable
32-3763MB	3m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Black Braid 30AWG Cable
32-3765MB	5m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Black Braid 30AWG Cable
32-3761MRB	1m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Red/Black Braid 30AWG Cable
32-3762MRB	2m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Red/Black Braid 30AWG Cable
32-3763MRB	3m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Red/Black Braid 30AWG Cable
32-3765MRB	5m HDMI Ultra High Speed 2.1 Male-Male (8K@60Hz) Red/Black Braid 30AWG Cable

The High Speed HDMI cable is designed and tested to handle video resolutions of 1080p and beyond, including advanced display technologies such as 4K, 3D, and Deep Color.

HDMI 1.4b Male - Male (4Kx2K@60Hz) High Speed+Ethernet HDMI Cable

32-3629	0.5m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz)+Ethernet 30AWG Black Cable
32-3631	1m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz)+Ethernet 30AWG Black Cable
32-3630	1.5m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz)+Ethernet 30AWG Black Cable
32-3632	2m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz)+Ethernet 30AWG Black Cable

HDMI Cables

PART NO	DESCRIPTION
32-3633	3m High Speed HDMI 1.4b Male-Male(4Kx2K@60Hz)+Ethernet 30AWG Black Cable
32-3634	5m High Speed HDMI 1.4b Male-Male(4Kx2K@60Hz)+Ethernet 30AWG Black Cable
32-3638	7m High Speed HDMI 1.4b Male-Male(4Kx2K@60Hz)+Ethernet 28AWG Black Cable
32-3635	10m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz)+Ethernet 24AWG Black Cable
32-3636	15m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz)+Ethernet 28AWG Black Cable
32-3637	20m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz)+Ethernet 28AWG Black Cable
32-3679	15m High Speed HDMI 1.4b Male-Male+Chipset (4Kx2K@60Hz)+Ethernet 28AWG Black Cable

HDMI 1.4b Male - Male (4Kx2K@60Hz) High Speed+Ethernet HDMI Braided Cable

32-3629MB	0.5m High Speed HDMI 1.4b Male-Male(4Kx2K@60Hz) 30AWG Black Braid Cable
32-3631MB	1m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz) 30AWG Black Braid Cable
32-3630MB	1.5m High Speed HDMI 1.4b Male-Male(4Kx2K@60Hz) 30AWG Black Braid Cable
32-3632MB	2m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz) 30AWG Black Braid Cable
32-3633MB	3m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz) 30AWG Black Braid Cable
32-3634MB	5m High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz) 30AWG Black Braid Cable
32-3629MRB	0.5m High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) 30AWG Black/Red Braided Cable
32-3631MRB	1m High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) 30AWG Black/Red Braided Cable
32-3630MRB	1.5m High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) 30AWG Black/Red Braided Cable
32-3632MRB	2m High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) 30AWG Black/Red Braided Cable
32-3633MRB	3m High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) 30AWG Black/Red Braided Cable
32-3634MRB	5m High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) 30AWG Black/Red Braided Cable

High Speed HDMI Cables that have been designed and certified for ultra-reliable performance for 4K/UltraHD including advanced features such as 4K60, HDR, expanded color spaces including BT.2020, and 4:4:4 chroma sampling.

Premium High Speed HDMI 1.4b Male-Male (4Kx2K@60Hz) Ethernet Cable

32-3670P	1m Premium High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) Ethernet 30AWG Black PVC Cable
32-3672P	2m Premium High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) Ethernet 30AWG Black PVC Cable
32-3673P	3m Premium High Speed HDMI 1.4b Male - Male (4Kx2K@60Hz) Ethernet 30AWG Black PVC Cable

HDMI Cables | HDMI Adaptors

Computer Cables, AV & Security

PART NO	DESCRIPTION

Slimline HDMI 1.4b Male - Male (4Kx2K@60Hz) High Speed+Ethernet Cable

32-3700	0.5m Slimline HDMI 1.4b Male - Male (4Kx2K@60Hz) High Speed + Ethernet 36AWG Black Cable
32-3702	1m Slimline HDMI 14b Male - Male (4Kx2K@60Hz) High Speed + Ethernet 36AWG Black Cable
32-3704	1.5m Slimline HDMI 1.4b Male - Male (4Kx2K@60Hz) High Speed + Ethernet 36AWG Black Cable
32-3705	2m Slimline HDMI 1.4b Male - Male (4Kx2K@60Hz) High Speed + Etherent 36AWG Black Cable
32-3706	3m Slimline HDMI 1.4b Male - Male (4Kx2K@30Hz) High Speed + Ethernet 34AWG Black Cable
32-3708	5m Slimline HDMI 1.4b Male - Male (4Kx2K@30Hz) High Speed + Ethernet 34AWG Black Cable

HDMI 1.4b Male - HDMI Male Mini C Black Cable

32-3640	2m HDMI 1.4b Male - HDMI Male Mini C High Speed + Ethernet 30AWG Black Cable

HDMI 1.4b Male - DisplayPort 1.2 Male 1080p Black Cable

24-0215	1m HDMI 1.4b - DisplayPort Male 1.2 1080p 60Hz Uni-D Black Cable
24-0216	2m HDMI 1.4b - DisplayPort Male 1.2 1080p 60Hz Uni-D Black Cable
24-0222	2m HDMI 1.4b Male (4Kx2K@60Hz) - Active DisplayPort Male 1.3 Black Cable
24-0217	3m HDMI 1.4b - DisplayPort Male 1.2 1080p 60Hz Uni-D Black Cable
24-0218	5m HDMI 1.4b - DisplayPort Male 1.2 1080p 60Hz Uni-D Black Cable

HDMI 1.4b Male - DVI-D Male 1080p 24+1 30AWG Black Cable

32-3749	1m HDMI 1.4b Male - DVI-D Male 1080p 24+1 30AWG Black Cable
32-3750	2m HDMI 1.4b Male - DVI-D Male 1080p 24+1 30AWG Black Cable
32-3752	3m HDMI 1.4b Male - DVI-D Male 1080p 24+1 30AWG Black Cable
32-3753	5m HDMI 1.4b Male - DVI-D Male 1080p 24+1 30AWG Black Cable
32-3754	10m HDMI 1.4b Male - DVI-D Male 1080p 24+1 28AWG Black Cable

HDMI Male - SVGA + 3.5mm Stereo Cable

32-3658	1m HDMI Male - SVGA Male + 3.5mm Stereo 30AWG Black Cable
32-3659	1.8m HDMI 1.4b Male - SVGA Male + 3.5mm Stereo 30AWG Black Cable

HDMI 1.4b - VGA Flat Cable w/audio 3.5 ST/M and USB A/M Power Black

32-3665	1m HDMI 1.4b - VGA Flat Cable w/audio 3.5 ST/M and USB A/M Power Black
32-3668	2m HDMI 1.4b - VGA Flat Cable w/audio 3.5 ST/M and USB A/M Power Black

PART NO	DESCRIPTION

HDMI Adaptors

24-0190	15cm HDMI 1.4b (4Kx2K@60Hz) - DisplayPort Male 1.2 Black Adaptor
HCIFP-80	20cm 4K HDMI 1.4b Female Lead - 25mm x 50mm HDMI 1.4b Female Adaptor
24-0300	20cm HDMI 1.4b USB 3.1c USB 3.0 - USB 3.1c Male Type A Active Adaptor
24-0306A	20cm HDMI Female 1.4b (4Kx2K@30Hz) - USB 3.1c Male Black Active Adaptor
40-1046	20cm HDMI Female - USB 3.0 Type A Male Black Adaptor
24-0209	HDMI 1.4b Male SVGA Female Passive Adaptor 1080p 60Hz + 3.5mm Audio + USB
HDMIS343	HDMI Male 1.4b - DVI-D Female Black Adaptor
HDMIS399	HDMI Right Angled Male 1.4b - Female Black Adaptor
24-0110	HDMI Female - 1080p 60Hz SVGA 3.5mm Audio Black Adaptor
HDMIF-DVIM	HDMI Female 1.4b DVI-D Male - DVI-D 24+1 Dual Link Black Adaptor
HDMIS402	HDMI Female 1.4b - Female Black Adaptor
24-0270	HDMI 1.4b - USB 3.1c Male Mini Adaptor

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cable assemblies in our

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See page 58
for more details

Computer Cables, AV & Security

AOC Fibre Optic HDMI | Thunderbolt™ | HDMI Extenders & Splitters

PART NO	DESCRIPTION

AOC Fibre Optic HDMI

Detachable AOC HDMI 2.0b 18Gbps Male - Male (4:4:4 4K@60Hz) LSOH Fibre Optic HDMI Cable

32-3781	10m Detachable AOC HDMI 2.0b 18Gbps Male-Male (4:4:4 4K@60Hz) LSOH Cable
32-3782	20m Detachable AOC HDMI 2.0b 18Gbps Male-Male (4:4:4 4K@60Hz) LSOH Cable
32-3783	30m Detachable AOC HDMI 2.0b 18Gbps Male-Male (4:4:4 4K@60Hz) LSOH Cable
32-3785	50m Detachable AOC HDMI 2.0b 18Gbps Male-Male (4:4:4 4K@60Hz) LSOH Cable
32-3787	70m Detachable AOC HDMI 2.0b 18Gbps Male-Male (4:4:4 4K@60Hz) LSOH Cable
32-3790	100m Detachable AOC HDMI 2.0b 18Gbps Male-Male (4:4:4 4K@60Hz) LSOH Cable

Detachable AOC HDMI 2.1 18Gbps Male - Male (4:4:4 4K@60Hz) LSOH Fibre Optic HDMI Cable

32-3791	5m AOC HDMI 2.1 48GBps Male-Male (4:4:4 4K@120Hz/8K@60Hz) LSOH Cable
32-3792	7.5m AOC HDMI 2.1 48GBps Male-Male (4:4:4 4K@120Hz/8K@60Hz) LSOH Cable
32-3793	10m AOC HDMI 2.1 48Gbps Male-Male (4:4:4 4K@120Hz/8K@60Hz) LSOH Cable
32-3794	15m AOC HDMI 2.1 48GBps Male-Male (4:4:4 4K@120Hz/8K@60Hz) LSOH Cable
32-3795	20m AOC HDMI 2.1 48GBps Male-Male (4:4:4 4K@120Hz/8K@60Hz) LSOH Cable
32-3796	30m AOC HDMI 2.1 48GBps Male-Male (4:4:4 4K@120Hz/8K@60Hz) LSOH Cable

More lengths available

AOC USB3.1c GEN2 Cable

32-3775	5m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3777	7.5m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3778	8m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3779	10m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable

DisplayPort 1.4 Male - Male 1.4 AOC Active Optical LSOH Cable

32-3730	10m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable
32-3731	15m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable
32-3732	20m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable
32-3733	30m DisplayPort Male 1.4 - Male 1.4 AOC Active Optical LSOH Cable

See our DisplayPort 1.4 AOC Cables on Page 106

Thunderbolt™ 4 *brings Thunderbolt to USB-C at speeds up to 40 Gbps a computer port connects to Thunderbolt devices, every display, and billions of USB devices.*

PART NO	DESCRIPTION

Thunderbolt™

Thunderbolt 4 40Gbps Docking Station 9 Port

40-4250	Thunderbolt4 9 Port Docking Station

Thunderbolt 4 Docking Station

40-4255	Thunderbolt 4 - 6 Port Docking Station

Thunderbolt 4 40Gbps Cable

40-4208	0.8m Passive Thunderbolt4 40Gbps 8K Black Cable
40-4220	2m Active Thunderbolt4 40Gbps 8K Black Cable

Thunderbolt 3 20Gbps Cable

40-4238	0.8m Passive Thunderbolt3 20Gbps 8K Black Cable
40-4240	2m Passive Thunderbolt3 20Gbps 8K Black Cable

HDMI Extenders & Splitters

32-3870	70m HDMI point-to-point extender with IR
32-3871	4K30 HDMI point to point extender
32-3872	4K30Hz HDMI point to point Extender, POC support
32-3860	4K30Hz HDMI point to point Extender, KVM support
32-3869	50m HDMI extender by Cat6 with IR support, loop-out on the sender
32-3864	HDMI extender over IP with 150m, uncompressed.
32-3866	HDMI over IP Extender by Cat5e/6 120m
32-3865	HDMI over IP Extender by Cat5e/6 120m, with KVM
32-3867	HDMI 4K30 extender by Cat6 with KVM 100 meters
32-3875	HDMI 2.0 Extender by Cat5e/6 - one-to-one,50m, POC
32-3880	HDMI 1 x 4 splitter, HDR & EDID support
32-3881	HDMI 4 x 1 switch, 4K60
32-3882	new HDMI 4 x 4 matrix switch, 4K60Hz
32-3883	HDMI extender over fiber optical 40KM
32-3885	150m 4-ports High-Speed USB2.0 Extender over Cat6
HDMI2PORT	2 Port HDMI Splitter 1 In 2 Out (4K)

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USB Docking Station Hubs and Multiport Adaptors

Computer Cables, AV & Security

USB Docking Station Hubs and Multiport Adaptors

Our Laptop Docking Stations offer Universal compatibility for USB-C and USB-A host connections with flexible monitor connector types, various power delivery options with DP, Ethernet, and HDMI connection options. This comprehensive portfolio offers solutions for virtually any workstation application, including traditional office workstations, Hot-Desks, Work-From-Home, and Boardroom connectivity, reduce help desk support, simplify deployment. Management

Our USB Hubs and adaptors are all plug-and-play, that expand the USB connectivity of your organization's desktop, laptop, or other USB-enabled host device by connecting multiple USB peripherals to a single USB port. Our USB Hubs are designed and engineered for maximum performance and stability, ensuring speeds are never throttled, even while using self-powered devices across shared ports. They've been rigorously tested for thermal & stress performance, signal integrity, and USB protocol compliance. All these products offer a variety of solutions with different features including:

- Single and Multi-Monitor Connectivity
- USB Peripheral Connectivity (including B.C 1.2 Peripheral Charging)
- Wired Gigabit Ethernet Connectivity
- USB Power Delivery Pass-Through
- SD & Micro SD Storage Expansion

PART NO	DESCRIPTION
Docking Stations	
40-4140	USB-C Triple 4K Monitor 15 Port Docking Station with 100W Laptop Charging
40-4141	Universal 19 Port Dual Monitor Docking Station
40-4142	USB-C 16 Port Docking Station with 100W Laptop Charging

PART NO	DESCRIPTION
USB 4 Docking Stations	
40-4466	6 in 1 USB 4 Docking Station Hub
40-4471	11 in 1 USB 4 Docking station Hub
USB-C Docking Stations	
40-4100	6 in 1 USB-C Docking Station Hub
40-4106	6 in 1 USB-C Docking Station with USB3, HDMI & Gigabit
40-4107	7 in 1 USB-C Docking Station Hub
40-4108	8 in 1 USB-C Docking Station Hub
40-4109	9 in 1 USB-C Docking Station Hub
40-4111	11 in 1 USB-C Docking Station Hub
40-4115	11-in-1 USB- C Keyboard Docking Station Hub
40-4139	11-in-1 USB-C DisplayLink Docking Station Hub with 100W PD 3 x Displays
40-4136	11-in-1 USB-C DisplayLink Docking Station Hub - Enables 3 x Displays
40-4113	13 in 1 USB-C to HDMI Docking Station Hub
USB 2.0 Hubs	
40-1001	4 Port USB 2.0 Bus Hub
40-1002	4 Port USB 2.0 Bus powered Hub Black + 19cm Lead
40-1004	4 Port USB 2.0 Powered Bus Hub
40-1003	4 Port USB 2.0 Mains Powered Hub Black + 80cm Lead
USB 3.0 Hubs	
40-1007	4 Port USB 3.0 Hub
40-1008	4 Port USB 3.0 Bus Powered Ultra Mini Hub
40-1434	4 in 1 Type C Hub USB3.0 * 3 + Type C PD 60W

Please see our website www.cablenet.co.uk for new product releases and up-to-date products and product information

Computer Cables, AV & Security

PART NO	DESCRIPTION

AOC USB 3.1c Gen2 Cables

32-3775	5m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3777	7.5m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3778	8m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3779	10m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable

USB-C Power Plug

24-0323	USB-C 100w UK Power Plug with 1m Lead White
24-0322	USB-C 100w UK Adaptor Power Plug

USB Adaptors

USB 3.1c Adaptor Cables

24-0313	USB 3.1c Male 3-in-1 MST Splitter Adaptor
24-0314	3-in-1 DisplayPort MST Splitter Adaptor (Input 1 HDMI + 2 DisplayPort)
24-0315	3-in-1 DisplayPort MST Splitter Adaptor (Input 3 x DisplayPort)
24-0300	20cm USB 3.1c Male - HDMI 1.4b USB3.1c, USB 3.0 Type A Active Adaptor
24-0306	20cm USB 3.1c Male - HDMI 1.4b Female (4Kx2K@30Hz) Black Active Tailed Adaptor
24-0306A	20cm USB 3.1c Male - HDMI 1.4b Female (4Kx2K@30Hz) Black Active Adaptor
24-0282	15cm USB 3.1c - HDMI & USB 3.0 with PD Function (Power Delivery)
24-0301	20cm USB 3.1c Male - SVGA, USB 3.1c, USB 3.0 Type A Active Adaptor
24-0280	15cm USB 3.1c Male - VGA Female with PD Function (Power Delivery)
24-0319W	15cm USB Type C Male - VGA Female White Adaptor
24-0304	20cm USB 3.1c Male - VGA Female (1920x1080p@60Hz) Black Active Adaptor
24-0305	20cm USB 3.1c Male - VGA Female (1920x1080p@60Hz) White Active Tailed Adaptor
24-0303	20cm USB 3.1c Male - DVI Female (4Kx2K@30Hz) Active Adaptor
24-0307	20cm USB 3.1c Male - DisplayPort Female 1.2 (4Kx2K@30Hz) Black Active Tailed Adaptor
24-0307A	20cm USB 3.1c Male - DisplayPort Female 1.2 (4Kx2K@60Hz) Black Active Adaptor

PART NO	DESCRIPTION
40-4036	15cm USB 3.1c Male - Mini DisplayPort Female Adaptor
24-0308	20cm USB 3.1c Male - Ethernet RJ45 Female Adaptor
24-0309W	15cm USB 3.1C Female - USB 3.1C Male Tailed White PVC Adapter
24-0309B	15cm USB 3.1C Female - USB 3.1C Male Tailed Black PVC Adapter
24-0309S	15cm USB 3.1C Female - USB 3.1C Male Tailed Aluminium Braided Adaptor
24-0312	20cm USB 3.1c Male - USB 3.0 Type A Female Black Adaptor
24-0325	1m USB 3.1c Male - USB 3.1c Male with USB 3.0 Adaptor Black
24-0310	USB 3.1c Male - USB3.0 Type A Female Black Adaptor
24-0311	USB 3.1c Female - USB3.0 Type A Male Black Adaptor

USB 3.1c Mini Adaptors

24-0270	USB 3.1c Male - HDMI 1.4b Mini Adaptor
24-0271	USB 3.1c Male - DisplayPort 1.4 Mini Adaptor
24-0272	USB 3.1c Male - Gigabit Ethernet RJ45 Female Mini Adaptor

USB 3.0 Display Adaptors

40-1046	20cm USB 3.0 Type A Male - HDMI Female Tailed Adaptor
40-1047	20cm USB 3.0 Type A Male - Gigabit Ethernet RJ45 Tailed Adaptor

USB 2.0 Adaptors

40-1014	USB 2.0 - VGA/SVGA Adaptor
40-1029	2m USB 2.0 Serial DB9/25 Converter
40-1030	USB Type A Male - PS2 x 2 Female Converter
40-1032	USB 2.0 - Ethernet 10/100 Black Adaptor

Please see our website **www.cablenet.co.uk** for new product releases and up-to-date products and product information.

Computer Cables, AV & Security

PART NO	DESCRIPTION

USB 4c Cables

USB 4c Male Gen3 8K ExRP (Extended Range Power) – USB4c Male Black Cable

40-4420	USB-IF Certified 1m USB 4c Gen3 40Gbps 8K ExRP 240w PD USB-C Black Cable
40-4421	USB-IF Certified 1.5m USB 4c Gen3 40Gbps 8K ExRP 240w PD USB-C Black Cable

USB 4c Male Gen3.2 40Gbps - USB4 Male Passive Black Cable

40-4403	0.3m USB 4c Male Gen 3.2 40Gbps - USB4 Male Passive Black Cable
40-4405	0.5m USB 4c Male Gen 3.2 40Gbps - USB4 Male Passive Black Cable
40-4408	0.7m USB 4c Male Gen 3.2 40Gbps - USB4 Male Passive Black Cable
40-4410	1m USB 4c Male Gen 3.2 40Gbps - USB4 Male Passive Black Cable
40-4415	1.5m USB 4c Male Gen 3.2 40Gbps - USB4 Male Passive Black Cable

USB 4c Male - DisplayPort 1.2 Male Black Cable

40-4425	1m USB 4c Male - DisplayPort 1.2 (4Kx2K@60Hz) Male Black Cable
40-4426	2m USB 4c Male - DisplayPort 1.2 (4Kx2K@60Hz) Male Black Cable

USB 4c Male - HDMI 1.4b Male Black Cable

40-4441	1m USB 4c Male - HDMI 1.4b (4Kx2K@60Hz) Male Black Cable
40-4442	2m USB 4c Male - HDMI 1.4b (4Kx2K@60Hz) Male Black Cable
40-4443	3m USB 4c Male - HDMI 1.4b (4Kx2K@60Hz) Male Black Cable

USB-IF Certified

USB-IF Certified 2.0 Black Cable

USB2055BK-IF	USB-IF Certified 3m USB 2.0 Type C to USB Type A Black Cable

USB-IF Certified 4c Gen3 Male - Male Black Cable

40-4415	USB-IF Certified 1.5m USB4c Gen3 40Gbps 100W PD Male-Male Black Cable

USB-IF Certified 3.2 Gen2 Male - Male Black Cable

40-4301	USB-IF Certified 3.2 Gen2 20Gbps (Video) 100wPD 1m Male-Male Black Cable
40-4302	USB-IF Certified 3.2 Gen2 20Gbps (Video) 60w PD 2m Male-Male Black Cable

USB-IF Certified Premier+ 3.2 Gen2 Braided USB Cable

40-4351	USB-IF Certified Premier+ 3.2 Gen2 20Gbps (Braided) 100w PD 1m Male - Male Cable
40-4352	USB-IF Certified Premier+ 3.2 Gen2 20Gbps (Braided) 100w PD 2m Male - Male Cable
40-4353	USB-IF Certified Premier+ 3.2 Gen2 20Gbps (Braided) 100w PD 3m Male - Male Cable

PART NO	DESCRIPTION

AOC USB 3.1c Gen2 Cables

32-3775	5m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3777	7.5m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3778	8m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable
32-3779	10m AOC USB 3.1c Gen2 Male - USB 3.1c Gen2 Male PVC Cable

USB 3.1c - Display Cables

USB 3.1c - Display Cables

40-4020	1m USB 3.1c Male - DisplayPort 1.2 (4Kx2K@60Hz) Male Black Cable
40-4021	2m USB 3.1c Male - DisplayPort 1.2 (4Kx2K@60Hz) Male Black Cable
40-4022	3m USB 3.1c Male - DisplayPort 1.2 (4Kx2K@60Hz) Male Black Cable
40-4032	1m USB 3.1c Male - DVI 24+1 (4K@30Hz) Male Black Cable
40-4033	2m USB 3.1c Male - DVI 24+1 (4K@30Hz) Male Black Cable
40-4025	2m USB 3.1c Male - SVGA HD15 1080p 60Hz Male Black Cable
40-4029	2m USB 3.1c Male - Mini DisplayPort (4Kx2K@60Hz) Male Black Cable
40-4054	1m USB 3.1c Male - HDMI 1.4b (4Kx2K@60Hz) Male Black Cable
40-4055	2m USB 3.1c Male - HDMI 1.4b (4Kx2K@60Hz) Male Black Cable
40-4056	3m USB 3.1c Male - HDMI 1.4b (4Kx2K@60Hz) Male Black Cable

USB 3.1c Male - USB 2.0 Type A Male Black Cable

40-4061	1m USB 3.1c Male - USB 2.0 Type A Male Black Cable
40-4062	2m USB 3.1c Male - USB 2.0 Type A Male Black Cable

USB 3.1c Male - USB 3.0 Type A Male Black Cable

40-4066	1m USB 3.1c Male - USB 3.0 Type A Male Black Cable
40-4067	2m USB 3.1c Male - USB 3.0 Type A Male Black Cable

USB 3.1c - Cable Assemblies

40-4082	1m USB 3.1c - USB 2.0 Type B Male Black Cable
40-4092	2m USB 3.1c - USB 2.0 Micro Type B Male Black Cable

USB 3.1c - Lightning Cable

40-4077	2m USB 3.1c Male - Lightning MFI Cable White Cable

USB-C Power Plug

24-0323	USB-C 100w UK Power Plug with 1m Lead White
24-0322	USB-C 100w UK Adaptor Power Plug

Computer Cables, AV & Security

PART NO	DESCRIPTION

USB 3.0 Cables

USB 3.0 Type A Male - Type A Female Active Extension

40-1040	5m USB 3.0 Type A Male - USB 3.0 Type A Female Active Black PVC Extension Cable
40-1041	10m USB 3.0 Type A Male - USB 3.0 Type A Female Active Black PVC Extension Cable

USB 3.0 Type A Male - USB 3.0 Type B Male Cable

40-3020	3m USB 3.0 Type A Male - USB 3.0 Type B Male Blue Cable
40-3005BLK	1m USB 3.0 Type A Male - USB 3.0 Type B Male Black Cable
40-3010BLK	2m USB 3.0 Type A Male - USB 3.0 Type B Male Black Cable
40-3020BLK	3m USB 3.0 Type A Male - USB 3.0 Type B Male Black Cable
40-3030BLK	5m USB 3.0 Type A Male - USB 3.0 Type B Male Black Cable

USB 3.0 Type A Male - Micro Type B Black Cable

40-3078BLK	2m USB 3.0 Type A Male - Micro Type B Black Cable

USB 3.0 Type A Male - Type A Female - Extension Cable

40-3092	2m USB 3.0 Type A Male - USB 3.0 Type A Female Blue PVC Extension Cable
40-3092BLK	2m USB 3.0 Type A Male - USB 3.0Type A Female Black PVC Extension Cable

USB 3.0 BUS Hub

40-1007	4 Port USB 3.0 Hub
40-1008	4 Port USB 3.0 Bus Powered Ultra Mini Hub

USB 2.0 Cables

USB 2.0 Type A Male - Mini B Male Black Cable

32-3078	2m USB 2.0 Type A Male - USB Mini Type B Male Black PVC Cable

USB 2.0 Type A Male - Micro B Male Black Cable

32-3080	0.5m USB 2.0 Type A Male - USB Micro Type B Male Black PVC Cable
32-3079	2m USB 2.0 Type A Male - USB Micro Type B Male Black PVC Cable

USB 2.0 Type A Male - Type A Female Active Repeater Cable

32-3588	5m USB 2.0 Type A Male - USB 2.0 Type A Female Active Black Repeater Cable
32-3589	10m USB 2.0 Type A Male - USB 2.0 Type A Female Active Black Repeater Cable
32-3590	15m USB 2.0 Type A Male - USB 2.0 Type A Female Active Black Repeater Cable
32-3591	20m USB 2.0 Type A Male - USB 2.0 Type A Female Active Black Repeater Cable

USB 2.0 Type A Male - Type B Male Active Repeater Cable

32-3610	10m USB 2.0 Type A Male - USB 2.0 Type B Male Active Black Repeater Cable

USB 2.0 Type A Male - Type A Female Extension Cable

USB005BK	0.5m USB 2.0 Type A Male - USB 2.0 Type A Female Black PVC Extension Cable
USB1000BK	1m USB 2.0 Type A Male - USB 2.0 Type A Female Black PVC Extension Cable

PART NO	DESCRIPTION
USB2000BK	2m USB 2.0 Type A Male - USB 2.0 Type A Female Black PVC Extension Cable
USB2001BK	3m USB 2.0 Type A Male - USB 2.0 Type A Female Black PVC Extension Cable
USB2002BK	5m USB 2.0 Type A Male - USB 2.0 Type A Female Black PVC Extension Cable

USB 2.0 Type A Male - USB 2.0 Type A Male Black Cable

USB2048BK	0.5m USB 2.0 Type A Male - USB 2.0 Type A Male Black PVC Cable
USB2049BK	1m USB 2.0 Type A Male - USB 2.0 Type A Male Black PVC Cable
USB2050BK	2m USB 2.0 Type A Male - USB 2.0 Type A Male Black PVC Cable
USB2052BK	3m USB 2.0 Type A Male - USB 2.0 Type A Male Black PVC Cable
USB2051BK	5m USB 2.0 Type A Male - USB 2.0 Type A Male Black PVC Cable

USB 2.0 Type A Male - USB 2.0 Type B Male Black Cable

USB2008BK	0.5m USB 2.0 Type A Male - USB 2.0 Type B Male Black PVC Cable
USB2009BK	1m USB 2.0 Type A Male - USB 2.0 Type B Male Black PVC Cable
USB2010BK	2m USB 2.0 Type A Male - USB 2.0 Type B Male Black PVC Cable
USB2020BK	3m USB 2.0 Type A Male - USB 2.0 Type B Male Black PVC Cable
USB2030BK	5m USB 2.0 Type A Male - USB 2.0 Type B Male Black PVC Cable

USB 2.0 BUS Hub

40-1001	4 Port USB 2.0 Bus Hub
40-1002	4 Port USB 2.0 Bus Powered Hub Black + 19cm Cable
40-1004	4 Port USB 2.0 Powered Bus Hub
40-1003	4 Port USB 2.0 Mains Powered Hub Black + 80cm Cable

Cisco Compatible Cables

34-5025	1.8m Blue Console Cable USB Type A Male - RJ45 Male
34-5021	2.1m Blue Console Cable DB9 Female - RJ45 Male
34-5112	3m Cisco Equivalent CAB-E1-RJ45BNC Cable

FPC Cables

USB4 Type C Male - Male

44-4450	14cm USB 4 Type C Male - Male FPC 40Gbps

USB3.2 Type C Male - Female Adaptor FPC

44-4451	13cm USB 3.2 Type C Male - HDMI Female Adaptor FPC 4K@60Hz
44-4452	13cm USB 3.2 Type C Male - DisplayPort Female Adaptor FPC 4K@60Hz
44-4453	12cm USB 3.2 Type C Male - VGA Femal Adaptor FPC 1080p HD @ 30Hz
44-4454	15cm USB 3.2 Type C Male - RJ45 Female Adaptor FPC Gigabit 10/100/1000

CABLENET

Computer Cables, AV & Security

PART NO	DESCRIPTION

USB Apple Products

24-0321	Apple Compatible 2m USB-C to USB-C Charging Cable
24-0320	Apple Compatible Fast Charger USB-C Socket to UK Plug 20W
32-0301	1m USB 2.0 Type A Male - Lightning 8Pin Male White Cable
32-0302	2m USB 2.0 Type A Male - Lightning MFI 8Pin Male White Cable
40-4077	2m USB 3.1c Male - Lightning MFI White Cable

Serial RS232 Cables

32-0386	2m RS232 Serial DB9 Male - Female All Lines Grey PVC Cable
32-0388	5m RS232 Serial DB9 Male - Female All Lines Black PVC Cable
32-0389	10m RS232 Serial DB9 Male - Female All Lines Grey PVC Cable

SVGA Cables

SVGA DDC2 HD15 Male - Male Black Cable

32-1005	0.5m SVGA DDC2 HD15 Male - Male Black PVC Cable
32-1010	1m SVGA DDC2 HD15 Male - Male Black PVC Cable
32-1020	2m SVGA DDC2 HD15 Male - Male Black PVC Cable
32-1030	3m SVGA DDC2 HD15 Male - Male Black PVC Cable
32-1050	5m SVGA DDC2 HD15 Male - Male Black PVC Cable
32-1100	10m SVGA DDC2 HD15 Male - Male Black PVC Cable
32-1200	20m SVGA DDC2 HD15 Male - Male Black PVC Cable
GZS-5MF	5m SVGA HD15 Male - Female Black PVC Cable with Ferrites
GZS-10MF	10m SVGA HD15 Male - Female Black PVC Cable with Ferrites
GZS-15MF	15m SVGA HD15 Male - Female Black PVC Cable with Ferrites
GZS-20MF	20m SVGA HD15 Male - Female Black PVC Cable with Ferrites

SVGA DDC2 HD15 Male - Female Black Cable

GZS-1MM	1m SVGA HD15 Male - Male Black PVC Cable with Ferrites
GZS-2MM	2m SVGA HD15 Male - Male Black PVC Cable with Ferrites
GZS-3MM	3m SVGA HD15 Male - Male Black PVC Cable with Ferrites
GZS-5MM	5m SVGA HD15 Male - Male Black PVC Cable with Ferrites
GZS-10MM	10m SVGA HD15 Male - Male Black PVC Cable with Ferrites
GZS-15MM	15m SVGA HD15 Male - Male Black PVC Cable with Ferrites
GZS-20MM	20m SVGA HD15 Male - Male Black PVC Cable with Ferrites
GZS-30MM	30m SVGA HD15 Male - Male Black PVC Cable with Ferrites

PART NO	DESCRIPTION

SVGA with Audio HD15 Male - Male + 3.5mm Stereo Black Cable

V10AD-SVGA	10m SVGA with Audio HD15 Male - Male + 3.5mm Stereo Black PVC Cable
V15AD-SVGA	15m SVGA with Audio HD15 Male - Male + 3.5mm Stereo Black PVC Cable

SVGA Adaptors

24-0209	HDMI 1.4b Male SVGA Female Passive Adaptor 1080p 60Hz+3.5mm Audio+USB
24-2980	20cm SVGA Male - 2 x SVGA Female Black Cable Splitter
24-0110	SVGA 1080p 60Hz 3.5mm Audio - HDMI Female Black Converter
32-3658	1m SVGA Male + 3.5mm Stereo - HDMI Male 30AWG Black Cable
32-3659	1.8m SVGA Male + 3.5mm Stereo - HDMI Male 30AWG Black Cable
32-3665	1m SVGA Male + 3.5mm Stereo - HDMI 1.4b Male 30AWG Black Cable
32-3668	1.8m SVGA Male + 3.5mm Stereo - HDMI 1.4b Male 30AWG Black Cable
40-4025	2m SVGA HD15 - USB 3.1c Male 1080p 60Hz Male Black Cable
24-0301	20cm SVGA, USB 3.1c, USB 3.0 Type A - USB 3.1c Male Active Adaptor
24-0304	20cm VGA Female (1920x1080p@60Hz) - USB 3.1c Male Tailed Black Active Adaptor
24-0295	15cm VGA, DVI and HDMI - USB 3.1c Adaptor
24-0371	9cm SVGA 1080p 60Hz HDMI (4Kx2K@30Hz) - USB 3.1c Male Black Adaptor

Gender Changers

GENCHAN9MM	RS232 DB9 Male - Male Gender Changer

COMING SOON....
a range of Armoured Computer Cables

Computer Cables, AV & Security

BNC Cable Assemblies | Coaxial Cable | Cable Boots | BNC Adaptors & Plugs

PART NO	DESCRIPTION

BNC Cable Assemblies

RG58
ASB58-0.5	0.5m RG58 Plug - Plug Booted Black Cable
ASB58-2	2m RG58 Plug - Plug Booted Black Cable
ASB58-3	3m RG58 Plug - Plug Booted Black Cable
ASB58-5	5m RG58 Plug - Plug Booted Black Cable

RG59
ASB59-0.5	0.5m RG59 Plug - Plug Booted Black Cable
ASB59-1	1m RG59 Plug - Plug Booted Black Cable
ASB59-2	2m RG59 Plug - Plug Booted Black Cable
ASB59-3	3m RG59 Plug - Plug Booted Black Cable
ASB59-10	10m RG59 Plug - Plug Booted Black Cable
ASB59-20	20m RG59 Plug - Plug Booted Black Cable

RG179
ASB179-0.5	0.5m RG179 Plug - Plug Booted Black LSOH Cable
ASB179-1	1m RG179 Plug - Plug Booted Black LSOH Cable
ASB179-2	2m RG179 Plug - Plug Booted Black LSOH Cable
ASB179-3	3m RG179 Plug - Plug Booted Black LSOH Cable
ASB179-5	5m RG179 Plug - Plug Booted Black LSOH Cable
ASB179-10	10m RG179 Plug - Plug Booted Black LSOH Cable
ASB179-20	20m RG179 Plug - Plug Booted Black LSOH Cable

VFX2000 HD-SDI Cables
NASB2000BK-05	0.5m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-1	1m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-3	3m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-5	5m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-10	10m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-15	15m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-20	20m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-25	25m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-30	30m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-40	40m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable
NASB2000BK-50	50m VFX2000 Neutrik BNC Plug - Plug HD-SDI Booted Black Cable

PART NO	DESCRIPTION

Coaxial Cable

RG58
CAB58C	RG58CU 50Ohm LSOH CPR Eca Coax Cable Black 100m Reel

RG179
CAB179	RG179 75Ohm LSOH CPR Eca Coax Cable Black 100m Reel

RG59
EC-CAB59	RG59 75Ohm Solid PVC CPR Eca Braid Coax Cable Black 100m Reel

Cable Boots

RG58 Boot
BOOT58-BLK	RG58 Strain Relief Boot Black
BOOT58-BLU	RG58 Strain Relief Boot Blue
BOOT58-WHI	RG58 Strain Relief Boot White

RG59 Boot
BOOT59-BLK	RG59 Strain Relief Boot Black
BOOT59-BLU	RG59 Strain Relief Boot Blue
BOOT59-GRN	RG59 Strain Relief Boot Green
BOOT59-RED	RG59 Strain Relief Boot Red
BOOT59-VIO	RG59 Strain Relief Boot Violet
BOOT59-WHI	RG59 Strain Relief Boot White
BOOT59-YEL	RG59 Strain Relief Boot Yellow

RG174/179 Boot
BOOT1694BLK	VFX2000/1694 Eq. Strain Relief Boot VFX2000 + 1694 Equiv
BOOT174-BK	RG174/179 Strain Relief Boot Black
BOOT-174GR	RG174/179 Strain Relief Boot Grey

BNC Adaptors & Plugs

BNC Crimp Plug RG58CU
BNC1-58	BNC Crimp Plug RG58CU Turned
BNC2-58	BNC Crimp Plug RG58CU Turned Handy Pack 100pcs
BNC2-58D	BNC Crimp Plug RG58CU Diecast Handy Pack 100pcs
BNC8-58	BNC Crimp Jack RG58CU Turned
TNC1-58	TNC Crimp Plug RG58

Computer Cables, AV & Security

PART NO	DESCRIPTION
BNC Crimp Plug RG59	
BNC1-59-A	BNC Crimp Plug RG59 Diecast
BNC1-59BT	BNC Crimp Plug RG59 + Black Boot Diecast
BNC1-M59W	BNC Crimp Plug Mini RG59 Turned
BNC1-T59	BNC Crimp Plug RG59 Turned
BNC2-59D-A	BNC Crimp Plug RG59 Diecast Handy Pack 100pcs
BNC5-59	BNC Right Angle Crimp Plug RG59 Turned
BNC8-59	BNC Crimp Jack RG59 Turned
BNC 4 Part Crimp Jack RG179	
BNC8-179	BNC 4 Part Crimp Jack RG179 Turned
BNC10-179	BNC 4 Part Crimp Jack RG179 Insulated Turned
BNC1-179	BNC 4 Part Crimp Plug RG179 Turned
BNC1-179BT	BNC 4 Part Crimp Plug RG179 + Black Boot Turned
BNC1-179D	BNC 4 Part Crimp Plug RG179 Diecast
BNC1-179D-BT	BNC 4 Part Crimp Plug RG179 + Black Boot Diecast
BNC2-179D	BNC Crimp Plug RG179 Diecast Handy Pack 100pcs
BNC4-179	BNC 4 Part Crimp Jack RG179 Turned Handy Pack 100pcs
BNC5-179	BNC Right Angle Crimp Plug RG179 Turned
BNC Socket and Adaptors	
BNC20-75	BNC Inline Socket - Socket Coupler 75Ohm Diecast
BNC20T	BNC Inline Socket - Socket Coupler 50Ohm Turned
BNC22	BNC Bulkhead Socket - Socket Insulated Coupler 75Ohm Turned
BNC23D	BNC Plug - Socket Right Angle - Short 75Ohm Diecast
BNC24	BNC T Adaptor Plug - Socket - Socket
BNC25	BNC F Adaptor Plug - Socket - Socket
BNC26	BNC Y Adaptor Plug - Socket - Socket Turned
BNC31	BNC Terminator Plug 75Ohm
BNC33	BNC Plug - Plug Adaptor 75Ohm
BNC Miscellaneous	
BNC1-100	BNC Crimp Plug CT100 (RG6) Turned
BNC1-11	BNC Crimp Plug RG11 Turned
BNC1-125	BNC Crimp Plug CT125 Turned
BNC1-125RB	BNC Crimp PlugCT125 RBS Turned
BNC1-3002	BNC Crimp Plug BT3002 Turned
BNC1-SD	BNC Crimp Plug SDI Serial Digital Turned

PART NO	DESCRIPTION
BNC7	BNC Clamp Plug RG6, RG58, RG59, PSF1/3, CT100 Turned
BNC8-SD	BNC Crimp Jack VFX720 SDI Turned
BSA1	BNC Plug - RCA Socket
BSA2	BNC Socket - RCA Plug
F1-100	F Crimp Plug CT100
VBNCSD-1	BNC Gold Crimp Plug VFX720 SDI Turned

BNC Tools

TOOL1	RG58 & RG59 Ratchet Crimp Tool
TOOL4	RG58 & RG59 Cable Stripper
TOOL14HQ	Tool Kit (RG59/58 Crimp Tool + Stripper + Cutter) High Quality
TOOL45	Tool Kit (RJ45/RJ11 Crimp Tool + 2a Tool + Cutters)
TOOL2	RG59, RG6, CT100 & CT125 Ratchet Crimp Tool
TOOL3	RG11, RG213 & CT125RBS Crimp Tool
TOOL15-6	BNC Removal Tool 6inch
TOOL4-179	RG179 Cable Stripper
TOOL15	BNC Removal Tool 12inch
TOOL2HQ	RG59 & CT100 High Quality Ratchet Crimp Tool

Multimedia

HCIFP-05	HDMI Female - Female (Gold) Keystone White
HCIFP-05BK	HDMI Female - Female (Gold) Keystone Black
HCIFP-15	USB 2.0 Type A Female - Female Keystone White
HCIFP-24	3.5mm Stereo Female - Female Keystone White
HCIFP-24BK	3.5mm Stereo Female - Female Keystone Black
HCIFP-25	F Type Female - Female Keystone White
HCIFP-25BK	F Type Female - Female Keystone Black
HCIFP-30	75Ohm BNC Female - Female Keystone White
HCIFP-40	HD15 Female - Female (25mm x 50mm) Module White
HCIFP-46	1 Port Keystone Housing (25mm x 50mm) White
HCIFP-46BK	1 Port Keystone Housing (25mm x 50mm) Black
HCIFP-47	2 Port Keystone Housing (25mm x 50mm) White
HCIFP-48	Blank Keystone White
HCIFP-48BK	Blank Keystone Black

Computer Cables, AV & Security

Multimedia | MuxLab Products | Kramer Products | Neutrik Products | Speaker Cable

PART NO	DESCRIPTION
HCIFP-50BK	Single Gang Dual Euro Faceplate Black
HCIFP-55BK	Cat5e 180 Unshielded IDC Keystone Jack Black
HCIFP-60	Cat5e UTP 110 IDC Keystone White
HCIFP-61BK	Cat5e UTP Female-Female Keystone Black
HCIFP-65	Cat6 UTP 110 IDC Keystone White
HCIFP-65BK	Cat6 UTP 110 IDC Keystone Black
HCIFP-66	Cat6 UTP Female - Female Keystone White
HCIFP-66BK	Cat6 UTP Female - Female Keystone Black
HCIFP-72	LC-LC Duplex MM Keystone White
HCIFP-72BK	LC-LC Duplex MM Keystone Black
AV-K16	16 Port 1u AV Black Patch Panel
AV-BNCBEZ75	BNC Female - Female A/V 75Ohm Bezel Black
AV-FBEZ	F Type A/V Bezel Black

MuxLab Products

M500028-WP-UK	Muxlab Stereo HI-FI Wall Plate Balun
M500028	Muxlab Stereo Hi-Fi Balun (RCA)
M500030	Muxlab Stereo PC Audio Balun (3.5mm Jack)
M500027	Muxlab Stereo Audio Balun (RCA)
M500306-2PK	Muxlab Shielded CATV Balun (2 Pack)
M500302	Muxlab CATV Balun II
M500302-2PK	Muxlab CATV Balun II (2pk)
M500009	Muxlab CCTV Screw Terminal Balun

Kramer Products

HDMI

Kramer HDMI range of cables includes High speed, extended distance Fibre HDMI

CLS-AOCH-XL-164	50m Kramer Active Optical High Speed Pluggable HDMI Cable Low Smoke & Halogen Free

We can offer Neutrik XLR, EtherCON, OpticalCON and PowerCON Cable Assemblies MADE TO ORDER in our workshop. *Contact our sales team for more details.*

PART NO	DESCRIPTION

XLR Connectors

NC3FXX	Neutrik XLR 3 Pole Female Connector
NC3FXX-D	Neutrik XLR 3 Pole Female Connector (PK100)
NC3MXX	Neutrik XLR 3 Pole Male Connector

SpeakON Connectors & Couplers

NL4FX	Neutrik SpeakON 4 Pole Cable Connector
NL4MP	Neutrik SpeakON 4 Pole Panel Mount

XLR & DMX Cables

NK003-013-1	1m Neutrik XLR 3 Pole Male - Female Cable
NK003-013-2	2m Neutrik XLR 3 Pole Male - Female Cable
NK003-013-3	3m Neutrik XLR 3 Pole Male - Female Cable
NK003-013-5	5m Neutrik XLR 3 Pole Male - Female Cable
NK003-013-10	10m Neutrik XLR 3 Pole Male - Female Cable
NK003-013-15	15m Neutrik XLR 3 Pole Male - Female Cable
NK003-013-20	20m Neutrik XLR 3 Pole Male - Female Cable
NK003-013-30	30m Neutrik XLR 3 Pole Male - Female Cable

Speaker Cable

Speaker Cable

CABSP2X2.5-LS	2 Core 2.5mm Professional Grade LSOH CPR Eca Speaker Cable Black 100m
CI-16-2-LS-PK	2 Core 1.5mm (41x0.2mm) Pro Grade LSOH CPR Eca Speaker Cable Pink 100m
CI-16-4-LS-PK-2	4 Core 1.5mm (41x0.2mm) Pro Grade LSOH CPR Eca Speaker Cable Pink 200m
CI-16-2-LS-PK-2	2 Core 1.5mm (41x0.2mm) Pro Grade LSOH CPR Eca Speaker Cable Pink 200m

Modular Cable

39-2504	4 Core PVC CPR Eca Silver Grey Flat Modular Cable 305m Reel
39-2506	6 Core PVC CPR Eca Silver Grey Flat Modular Cable 305m Reel
39-2508	8 Core PVC CPR Eca Silver Grey Flat Modular Cable 305m Reel

Microphone Cable

39-2015	2 Core 24AWG Flexible Microphone XLR Cable Black 100m Reel
39-2018	2 Core 24AWG Flexible Microphone XLR Cable Black 500m Reel
CAB2IS-BLK	2 Core Ind Screened LSOH PA Microphone 0.2mm CPR Eca Cable Black 100m

Earth Cable

EARTHCABLE	6941 X 2.5mm 1 Core (H07V-R) Green/Yellow Earth Cable 100m Reel

CABLENET

Tel. 01276 405300   Email. sales@cablenet.co.uk   Web. www.cablenet.co.uk

Inside this section...

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PLANET Networking & Communication

9 PDU "Must Haves"

1. kWh metering accuracy of 1%

ISO/IEC +/- 1% billing-grade accuracy for reporting and billing. Accurate kWh metering allows you to measure actual energy usage for accurate customer or department charge-back billing or reporting. The data can be used to encourage energy efficient behaviour among users, establish power consumption baselines and analyse the effect of efficiency initiatives.

2. Latching relays which consume 7W or less

Latching (bistable) relays only require power to switch from one state to another, i.e. on or off. This means the PDUs consume 67% less energy and thus produce less heat. Also, they can be configured to return to the pre-outage state instantly or sequence outlets on. Instantly on may be appropriate for operations where even moments of downtime can be costly, e.g. high-speed financial trading. Power sequencing may be important to minimize inrush current or where the operation requires certain devices to come on line before other devices, e.g. a data base used for processes.

3. Removable "hot swap" intelligent controller

A flush-mount controller with industrial-grade reliability, configurable firmware, disaster recovery support and hot swap capability.

4. High resolution colour display

The highest on-board resolution in the industry at 220 x 176, and easy to navigate menus. The colours are a useful indication such as turning the screen red for critical alarms. A built-in accelerometer enables the LCD display to change orientation automatically facilitating different installations.

5. Maximum operating temperature rating as possible

Many data centres monitor cold aisle temperatures to provide optimal cooling but, most rack PDUs are located in the hot aisle where IT equipment exhaust temperatures are much higher. A maximum operating temperature of up to 140F (60C) is recommended for reliable performance in high-heat environments.

6. Low-profile, flush-mount circuit breakers

Circuit breakers eliminate the need to stock fuses, don't require licensed electricians to change fuses, and eliminate the possibility of installing the wrong fuse. Low-profile circuit breakers improve rack accessibility by the elimination of circuit breaker doghouses (large housings) which can block inserting or removing devices in a rack. For rack PDUs rated 16A, the upstream facility circuit breaker provides sufficient overcurrent protection for the rack PDU so there are not circuit breakers on the PDU itself.

7. Residual current monitoring option

Current monitoring reduces the risk of electric shock by measuring current leaking to ground. It automatically checks the residual current circuitry and generates alerts if there is an unsafe condition.

8. User-configurable Power-On sequencing

Sophisticated outlet sequencing can power on equipment plugged into a single outlet or a group of outlets, e.g. devices with multiple power supplies. Power sequencing can minimize inrush currents and provide consistent powering up processes. User configurable means you can set which outlets to delay and how much to delay individual outlets, not just global settings to the entire PDU.

9. Rapid USB configuration

Configuring a PDU can include firmware updates, location and device naming conventions, setting critical and non-critical thresholds for power and environmental sensors, etc. USB configuration is a reliable, quick and easy method of configuring PDUs. Once a sample configuration has been created purchase as many USB flash drives as you have power strips in a row of cabinets. Copy the desired settings/sample configuration onto the USB drives and insert them into each PDU. By the time you return to the first cabinet, the configuration will have automatically finished by itself. The process takes about 20 seconds. You can now remove the USB drives and move on to the next row. With minimal effort, a single person can configure hundreds of power strips in a few hours. This method of configuration ensures error-free deployments, something that is unlikely if each PDU must be configured manually.

Need Help Finding the Right PDU?
You Need to Know...

Global Region:
Asia Pacific • Americas • Australia/New Zealand • Europe

Metering Type:
None • Input • Outlet

Switched Outlets:
Yes • No

Outlet Count:
0 • 1-50

Plug Type:
C20 • CS8265C • IEC 60309 316P6 • IEC 60309 332P6 IEC 60309 460P9 • IEC 60309 532P6 • NEMA 5-15P • NEMA L5-20P NEMA L5-30P • NEMA L6-30P • NEMA L21-30P

Form Factor:
0U • 1U • 2U

Common Questions

Will restarting my Rack PDU affect power to the outlets?
What is the default user name and password?
What is the default IP address?
Is it ok to change a fuse while the Rack PDU is still plugged in?
Where can I find the MIB?

Where can I find firmware updates?
Where can I find the product manual for my Rack PDU?
Where can I find a list of available data cables and power cords?
Will restarting the Sentry Power Manager (SPM) affect power on my Rack PDUs?
What do the 3 LED displays on my Rack PDU represent?
My LED says "FE" or "bE". What does this mean?

MY LED says "OL". What does this mean?
How do I manually reset my Rack PDU back to factory defaults?
Can I connect to "master" PDUs together?
Where can I find more technical documents including trouble-shooting steps?

We have the answers!

Intelligent Power &
Active Communications

Raritan®
A brand of **legrand**®

PART NO	DESCRIPTION
PX4	
PX4-5057-E7	18 x C13 Sockets & 18 x Cx Sockets RAM Lock System
PX4-5057-E7K7	18 x C13 Sockets & 18 x Cx Sockets RAM Lock System White Unit
PX4-5161-E7	1 Phase 12 x Locking C13 & 12 x Locking Cx
PX4-5502-E8	1 Phase, 32A, 0U, 24 Outlets, 16 x C13 & 8 x CX Outlets
PX4-559A-E8	1 Phase, 16A, 0U, 24 Outlets, 16 x C13 & 8 x CX Outlets
PX4-5886-E8	1 Phase, 32A, 0U, 36 Outlets, 24 x C13 & 12 x CX Outlets
PX4-5886-E8K7	1 Phase, 32A, 0U, 36 Outlets, 24 x C13 & 12 x CX Outlets White Unit
PX5000	**Switched and metered per outlet**
PX3-5190R	OS OM (16Amp) 8 x C13 Plug with IEC 60309 (16Amp) 1u
PX3-5466R	OS OM (32Amp) 20 x C13 Plug IEC 60309 (32Amp) 2u
PX3-5493V	OS OM (32Amp) 20 x C13 4 x C19 Plug IEC 60309 (32Amp) Zero U
PX3000	**Inline meters**
PX3-3220	Inline Meter 1 Phase (32 Amp) 2 lines Input Type 2 x AC Output 2 x AC Terminal 1u
PX1000	**Unit metered**
PX3-1493V	Unit Metered (32Amp) 20 x IEC C13 4 x IEC - C19 Plug IEC 60309 (32Amp) Zero U

Transfer Switches

PX3TS-1875CR	Transfer Switch (16Amp) 9 Outlets 8 x IEC C13 1 x IEC C19 Input 2 x IEC C20
PX3TS-5191CR	Transfer Switch OS OM (16Amp) 8 Outlets 7 x C13 1 x C19 Input 2 x IEC C20 Lock

SecureLock Leads

SLC14C13-0.5MK2-6PK	SecureLock Locking Leads 0.5m Blue 16AWG 1 x IEC C14 x IEC C13 (PK 6)
SLC14C13-1.0MK2-6PK	SecureLock Locking Leads 1m Blue 16AWG 1 x IEC C14 x IEC C13 (PK 6)
SLC14C13-1.5M-6PK	SecureLock locking Leads 1.5m Black 16AWG 1 x IEC C14 x IEC C13 (PK 6)
SLC14C13-1.5MK1-6PK	SecureLock locking Leads 1.5m Red 16AWG 1 x IEC C14 x IEC C13 (PK 6)

PART NO	DESCRIPTION
SLC14C13-1.5MK2-6PK	SecureLock locking Leads 1.5m Blue 16AWG 1 x IEC C14 x IEC C13 (PK 6)
SLC14C13-2.0MK1-6PK	SecureLock Locking Leads 2m Red 16AWG 1 x IEC C14 x IEC C13 (PK 6)
SLC14C13-2.0MK2-6PK	SecureLock Locking Leads 2m Blue 16AWG 1 x IEC C14 x IEC C13 (PK 6)

Sensors

DX2-T1	Dominion Px Temperature Sensor
DX2-T1H1	Dominion Px Temperature / Humidity Sensor
DX2-T3H1	Combo of Temperature (3), Humidity (1) and Sensors (T,T+H and T) 3m
DX2-T2H2	Combo of Temperature 2 Humidity 2 and Sensors 3m

DKX3

DKX3-108	8 Port 1 x IP 1 x Local Digital KVM Switch
DKX3-832	32 Port KVM-over-IP switch 8 remote users 1 local user virtual medi
DKX3-UST	Dominion KX III USER STATION

Serial Console Servers SX2

DSX2-4	4 Port Single Feed Serial Console Server
DSX2-8	8 Port Dual Feed Serial Console Server
DSX2-16	16 Port Serial Console Server with Dual Power AC and Dual Gigabit LAN
DSX2-32	32 Port Dual Feed Serial Console Server
DSX2-48	48 Port Serial Console Server Dual AC
DSX2-16M	16 Port Dual Feed Serial Console Server
DSX2-32M	32 Port Dual Feed Serial Console Server
DSX2-48M	48 Port Serial Console Server Dual AC

Cims and Adaptors

D2CIM-DVUSB	Dominion USB Cim Virtual Media with Bios Access
D2CIM-DVUSB-HDMI	Digital DisplayPort USB CIM

Intelligent Power & Active Communications

Server Technology
A brand of **legrand**

Server Technology is proud to be a brand of Legrand in the Datacenter Power and Control Division with our sister company Raritan. We are the division of Legrand leading the engineering and manufacture of customer-driven, innovative and exceptionally reliable power, access and control solutions for monitoring and managing critical IT assets for continual availability.

Server Technology's power strategy experts have provided power solutions for labs, data centers, and telecommunications operations for 30 years. Over 60,000 customers around the world rely on our rack power distribution units and award winning power management solutions to reduce downtime, facilitate capacity planning, improve energy utilization, and drive efficiency.

Stay Powered

Server Technology only focuses on power. With the best testing in the market and longest mean time to failure (MTTF), Server Technology provides uncompromising quality, reliability and value for the datacenter. Our customers' state that our quality is the number one reason why they choose Server Technology Rack PDUs.

Be Supported

Year after year our customers rate our support to be a key differentiator between us and our competitors. At Server Technology, comprehensive product support starts before you buy and extends throughout your relationship with us. Server Technology is focused on getting you the solutions you need when you need them - we strive to ship out your PDUs in 10 days or less.

Get Ahead

The ongoing exercise of designing new solutions has not only helped us secure a loyal customer base, it has also resulted in more Rack PDU design innovations then any of our competitors. With Server Technology you will get ahead.

PART NO	DESCRIPTION
ServerTech	
C4G36RA-EPBE2FE2	Switched POPS PRO4X iX PDU, 36 RamLock HDOT Outlets (12 C13 + 24 Cx), 230V 1PH 32A IEC 60309 1P+N+G 6Hr Input Cord, Bottom/Angled Cord Entry
C4W48RA-EPBE2FD7	Switched PRO4X iX PDU, 48 RamLock HDOT Outlets (24C13 + 24 Cx), 230V 1PH 32A IEC 60309 1P+N+G 6Hr Input Cord, Bottom/Angled Cord Entry
C4S48RA-EPBE2FD7	SmartPRO4X iX PDU, 48 RamLock HDOT Outlets (24C13 + 24 Cx), 230V 1PH 32A IEC 60309 1P+N+G 6Hr Input Cord, Bottom/Angled Cord Entry
C4S36RA-0ABE2FE2	SmartPRO4X iX PDU, 36 RamLock HDOT Outlets (12 C13 + 24 Cx), 120-240V 20A (16A) IEC C20 Inlet, Bottom/Angled Cord Entry

Intelligent Power & Active Communications

RENOWNED POWER MEETS REVOLUTIONARY INTELLIGENCE

THE ALL-NEW SERVER TECH PRO4X RACK PDU

Unsurpassed Density and Flexibility
to meet and anticipate ever-changing rack power infrastructure challenges

Gain Critical, Accurate, and Intuitive Power Quality Insights
with the most comprehensive set of rack power quality monitoring and metrics in the industry

Engineered for Mission-Critical Uptime and Reliability
with a truly hot-swappable controller and multi-layer redundancy for failover capabilities

Enterprise Level Security
provides unmatched safeguards for your network and physical IT assets

THE BEST JUST GOT BETTER WITH THE PRO4X PDU

The Server Technology PRO4X Rack Power Distribution Unit (PDU) doesn't just solve today's power needs; it anticipates tomorrow's power challenges. The PRO4X delivers a revolutionary best-in-class intelligent PDU with groundbreaking visibility, reporting, security, and alerting. All while integrating over 30 years of customer-driven technology, experience, quality, and innovation that builds on our renowned hardware technology.

INPUT CURRENT

PART NO	DESCRIPTION
ServerTech	
C4S48RA-2QBE2FD7	Smart PRO4X PDU
C2WG12SM-0AJA2D3	ServerTech 16A Switched POPS PRO2 9 x C13 + 3xCx

POPS

PART NO	DESCRIPTION
C3WG36RL-EPJE2MT4	ServerTech Switched POPS PRO3X 18 x C13 + 18 Cx
C3W36RL-2CJE2MT4	ServerTech Switched PRO3X with PIPS 18 x C13 + 18 Cx
STV-6501C	ServerTech Switched POPS/PIPS PRO2 30A 24 x IEC C13, 6 x C19, 1 x LED

45-Degree Angled Infeed

Cx Outlet

RamLock Mechanical Locking

Alternating Phase Outlet Power Distribution

Advanced Metering

Total Harmonic Distortion Measurements

TECH TERMS

Media Converters

Media conversion is a cost-effective solution to extend fiber networking rapidly rather than adopting optical fiber only. It also efficiently helps to solve the distance limit between the Ethernet and Local Area Network. With the feature-rich chassis provided by PLANET, at least 16 converters can easily expand the fiber optic networks by simply plug and play. The wiring distance of PLANET media converter chassis is extendable from 2 up to 120 kilometers and available upon request.

Building a network solution of FTTH (Fiber to the Home) or FTTC (Fiber to the Curb) for ISPs, PLANET Manageable family of media converter chassis and FST/GST converters offer the multiple selections for FTTx deployment. The Managed family is a series of managed Media Conversion Center that provides hot plug and play slots for various types of converters. Through the management interface, the entire status of the converters can be remotely controlled within the chassis from on/off and status/statistics of ports, as well as the advanced features like redundant links.

Switches

What is a Network Switch?
Most business networks today use switches to connect computers, printers and servers within a building or campus. A switch serves as a controller, enabling networked devices to talk to each other efficiently. Through information sharing and resource allocation, switches save businesses money and increase employee productivity.

What is a Unmanaged Network Switch?
An unmanaged switch works right out of the box. It's not designed to be configured, so you don't have to worry about installing or setting it up correctly. Unmanaged switches have less network capacity than managed switches. You'll usually find unmanaged switches in home networking equipment.

What is a Managed Network Switch?
A managed network switch is configurable, offering greater flexibility and capacity than an unmanaged switch. You can monitor and adjust a managed switch locally or remotely, to give you greater network control.

Ethernet Cabling Guidelines

	TWISTED PAIR	Multimode Fibre OM3	Multimode Fibre OM4	Singlemode Fibre OS2 1310mm	Singlemode Fibre OS2 1550mm
10BASE-T (10Mb/s)	✓	2000m	2000m	N/S	N/S
100BASE-T (100Mb/s)	✓	2000m	2000m	N/S	N/S
1000BASE-T (GbE)	✓	550m	1000m	5000m	N/S
10GBASE-T (10GbE)	✓	300m	550m	10000m	40000m
40GBASE-T (40GbE)	✓	100m	100m	10000m	40000m
100GBASE-T (100GbE)		100m	150m	10000m	40000m

N/S = Not Specified

Powered by PoE

The first generation of PoE, IEEE 802.3af Type 1 (15W), was used for powering lower-power devices like IP clocks, VoIP phones and simple security cameras. With the development of IEEE 802.3at Type 2 (30W), higher level IEEE 802.3bt Type 3 (60W) and Type 4 (90W), and POH (100W) for AV applications, remote powering technology now powers everything from wireless access points, advanced pan-tilt-zoom cameras, access control devices and LED lights, to video displays, point of sale machines and even computers and laptops.

Need to Know...

While PoE is simple to install and support, there are still a few important aspects to consider:

PoE budget – calculate how many devices will be connected and how many watts are needed for each of them. This will help determine the best type of switch, number of ports required, or number of switches needed. The good news is that the math is simple.

Avoid vendor lock-in – by choosing products that are standards-based and so can be blended in the same network.

Stick to standards-based products – without going into lots of technical detail, there have been various versions of PoE and equipment over the years, not all standards-based. Mixing-and-matching incompatible or products not compliant with current standards can affect performance or even cause system failure.

Upgrades and flexibility – plan for the future as much as possible, but also choose PoE solutions that can be easily extended or upgraded at a later date. Look for plug-and-play PoE product ranges that fit a wide variety of situations, from simple solutions for SMBs through to supporting the complex demands of mission-critical utilities.

Make the most of extra features – what will make the PoE network even better? For instance, will auto-sense for adjusting power requirements be useful? What about how the PoE switches are managed - can that be done remotely?

PoE Tech Standards

The principle of PoE power supply is based on the use of twisted copper pairs of the Ethernet cable to power from the source called PSE (Power Sourcing Equipment), the remote equipment called PD (Power Device).

The IEEE 802.3 standard sets the maximum distance of the Ethernet cable at 100 meters to take into account losses caused by the resistivity of the cable.

An Ethernet cable is made up of four pairs of wires. When the connection is 10 or 100 Mbits, the data travels on only two pairs, namely wires 1, 2, 3 and 6; the other two spare parts, namely the wires 4, 5, 7 and 8, can be used to convey the electric current (type A). It is however possible to use the wires 1, 2, 3 and 6 to convey the data and the power (type B), leaving the free pairs unused. When the connection is above 100 Mbits, the four pairs are used to carry the data. In this case, the power can be transmitted on the wires 1, 2, 3 and 6 or 4, 5, 7 and 8. The IEEE 802.3af (15 W) and 802.3at (30 W) PoE standards describe these two scenarios.

According to the standard, PDs must support power transmission capabilities in both types A and B.

On power-up, the PSE needs to determine how much power it needs to supply the PD to avoid damaging it. For this there are two methods: either by a HW protocol (Physical Layer Classification) or by using the LLDP protocol (Link Layer Discovery Protocol) for data exchange between the two devices PSE and PD.

The data and the power supply pass in the same Ethernet cable, so there is only one cable to be pulled per connected device. Therefore, compared to an external power supply, the amount of connectors and adapters is reduced.

The Different Options for Using the 4 Pairs

A first option is to use two pairs to power the PD and use the 4 pairs to convey the data.

A second option is to use the 4 pairs to both feed the PD and convey the data.

Source (PSE) Configurations

"PSE End Point" Configuration

The "End Point" configuration is used to connect a PoE power supply, usually a switch, to a PoE compatible PD remote dev.

"PSE Midspan" Configuration

The "Midspan" configuration is used to connect PoE-incompatible power equipment to PoE-compatible PD equipment via a PoE-compatible adapter.

IEEE 802.3BT Version

The work of the IEEE 802.3bt version (also called "4PPOE" or "POE++") takes into account this need to increase the supplied electrical power, as well as increasing the bandwidth to reach 10 Gbit/s. It incorporates advances in technology during this period (cf. the work on PoH).

Main evolutions of the IEEE 802.3bt version of the standard:

- Introduction of Type 3 and Type 4 for the PSE/PD duo to reach respectively 60 W and 90 W at the source (PSE)
- Using the 4 twisted pairs available in an Ethernet cable
- Addition of new power classes: classes 5 to 8 and improvement of the process of mutual identification between the PSE and PD
- Addition of the "Automatic class" function
- Increase of power supply (Extended power capability) if the length of the cable used is known
- Improvement of consumption in idle mode
- Increase of bandwidth up to 10 Gbits/s (10G-BASE-T cables)

The table below summarizes the different types of IEEE 802.3 standards:

Type	Standard	PSE min. input power	PD guaranteed min. power	Cable category	Max. cable length	Number of pairs
Type 1	IEEE 802.3af	15.4 W	12.95 W	Cat5e	100m	2 pairs
Type 2	IEEE 802.3at	30 W	25.5 W	Cat5e	100m	2 pairs
Type 3	IEEE 802.3bt	60 W	51 W – 60 W*	Cat5e and above	100m	2 pairs class 0-4 4 pairs class 0-4 4 pairs class 5-6
Type 4	IEEE 802.3bt	90 W	71 W – 90 W*	Cat5e and above	100m	4 pairs class 7-8

Provides power at the destination of 60 W for Type 3 and 90 W for Type 4, if the cable length is known (<100m)

PART NO	DESCRIPTION

Network Switches

SOHO Desktop Ethernet Switches

SW504	5 Port 10/100 Desktop Switch
SW804	8 Port 10/100 Desktop Switch
GSD503	5 Port 10/100/1000Mbps Giga Switch - External Power
GSD504	5 Port 10/100/1000 Plastic Desk Switch
GSD-603F	5 Port 10/100/1000 +1 SFP Gigabit Switch
GSD803	8 Port 10/100/1000Mbps Giga Switch - External Power
GSD804	8 Port 10/100/1000 Plastic Desk Switch

Rack Mount Ethernet Switch

GSW1601	16 Port 10/100/1000 Mbps Gigabit Ethernet Switch 19inch
GSW2401	24 Port 10/100/1000 Mbps Gigabit Ethernet Switch 19inch

PoE Solutions

Power Over Ethernet (PoE) Switches

GSD504UP	2 Port 10/100/1000T 802.3bt PoE Switch plus 1 Port Giga (120w)
GSD604HP	4 Port 10/100/1000T 802.3at PoE + 2 Port Desktop Switch
GSD804P	8 Port 10/100/1000 Switch with 4 Port 802.3af PoE Injector (55w)
GSD908HP	8 Port 10/100/1000 802.3at PoE Switch plus 1 Port Giga (120w)
GSD-1008HP	8 Port 10/100/1000 Switch 8 Port 802.3at 120w PoE + 2p 10/100/1000
GSD1121XP	8 Port 10/100/1000T 802.3at PoE + 2 Port 2.5G + 1 Port 10G SFP+ Ethernet Switch
GS-4210-8P2S	8 Port 100/1000X Managed 802.3at PoE Plus + 2 SFP Gigabit Switch
GS-4210-8UP2S	8 Port 10/100/1000T 802.3bt 95W PoE + 2 Port 100/1000X SFP Managed Switch
GSD2022P	16 Port 10/100/1000T 802.3at PoE 2 Port + 2 Port Desk Switch
GSW1820HP	16 Port 10/100/100T 802.3at PoE + 2 Port 1000X SFP Gigabit Ethernet Switch
GSW2620HP	24 Port 10/100/1000T 802.3at PoE + 2 Port 1000X SFP Gigabit Ethernet Switch
GS-5220-48PL4XR	48 Port 10/100/1000T 802.3at PoE + 4 Port 10G SFP+ Managed Switch

Power Over Ethernet (PoE) Injector Hubs

HPOE460	4 Port High Power PoE Injector Hub 802.3at 30w Desktop
HPOE1200G	12 Port PoE Injector Gigabit Ethernet 19inch 802.3at (350w)
HPOE2400G	24 Port PoE Injector Gigabit Ethernet 19inch 802.3at (500w)

PART NO	DESCRIPTION
UPOE-800G	8 Port Ultra PoE Injector Gigabit 19inch 60w Managed (400w)
UPOE-1600G	16 Port Ultra PoE Injector Gigabit 19inch 60w Managed (600w)
UPOE-2400G	24 Port Ultra PoE Injector Gigabit 19inch 60w Managed (800w)
UPOE-400	4 Port Multi-Gigabit 802.3bt PoE++ Injector Hub (160W)

Power Over Ethernet (PoE) Splitters and Extenders

POE161	High Power PoE Injector IEEE802.3at - 30w
POE162S	High Power PoE Splitter IEEE802.3at (12/24v)
POE163	High Power PoE + IEEE802.3at Giga Ethernet Injector - 30w (Pack)
POE-171A-95	Single-Port Multi-Gigabit 802.3bt PoE++ Injector (95W)
POE-175-95	Single-Port 10/100/1000Mbps 802.3bt PoE++ Injector
POE173	Ultra PoE Injector 10/100/1000Mbps 60w Internal Power
POE-E201	PoE Gigabit Ethernet Extender Repeater IEEE 802.3at
POE1200G	12 Port PoE Injector Gigabit Ethernet 19inch 802.3af (200w)
POE2400G	24 Port PoE Injector Gigabit Ethernet 19inch 802.3af (400w)
POETESTER+	IEEE 802.3af/at/bt Power over Ethernet Tester
ELA100	Ethernet Lighting Arrestor

Industrial Ethernet Switches

IGS-10020MT	IP30 Industrial Managed Gigabit 8 Port + 2 SFP Ethernet Switch
IGS-5225-4T2S	IP30 Industrial Managed Gigabit 4 Port + 2 SFP Ethernet Switch
IGS-801M	IP30 Industrial Managed Gigabit 8 Port Slim Ethernet Switch
ICS-115A	RS232/422/485 Serial Device Server with 1 Port 100BASE-FX SFP
ISW-501T	IP30 Industrial 5 Port Fast Slim Ethernet Switch
ISW-800T	IP30 Industrial 8 Port Fast Compact Ethernet Switch
ISW-801T	IP30 Industrial 8 Port Fast Slim Ethernet Switch
ISW-621TF	IP30 Industrial 4 Port + 2 SFP Fast Ethernet Switch
IGS-620TF	IP30 Industrial Gigabit 4 Port + 2 SFP Ethernet Switch
IGS-801T	IP30 Industrial Gigabit 8 Port Slim Ethernet Switch
IGS-501T	IP30 Industrial Gigabit 5 Port Slim Ethernet Switch
IGS-500T	IP30 Industrial Gigabit 5 Port Compact Ethernet Switch
IGS-4215-8T2S	IP30 Industrial Managed 8 Port + 2 SFP Gigabit Managed Switch

PART NO	DESCRIPTION

Industrial Ethernet PoE Switches

IGS-10020HPT	IP30 Industrial Managed Gigabit 8 Port + 2 SFP PoE + Ethernet Switch
IGS-4215-4P4T2S	IP30 Industrial Managed Gigabit 8 Port + 2 SFP PoE Switch
IGS-5225-4UP1T2S	IP30 Industrial Managed Gigabit 4 Port + 2 SFP PoE + Ethernet Switch
IGS-504PT	IP30 Compact 4 Port 802.3at PoE Plus + 1 Port Gigabit Switch
IGS-624HPT	IP30 Industrial Gigabit 4 Port + 2 SFP PoE + Ethernet Switch
IGS-5225-4P2S	IP40 Industrial Managed Gigabit 4 Port + 2 SFP PoE + Ethernet Switch
ISW-504PT	IP40 Industrial 5 Port PoE + Fast Ethernet Switch
ISW-514PTF	IP40 Industrial 4 Port + 1 SFP PoE + Fast Ethernet Switch

Industrial Media Converters

IGT-815AT	Industrial Compact 100/1000BASE-X to 10/100/1000BASE-T Media Converter
IGTP-802T	1000BASE-SX to 10/100/1000BASE-T 802.3at PoE+ Industrial Media Converter (SC,MM)
IGTP-802TS	1000BASE-LX to 10/100/1000BASE-T 802.3at PoE+ Industrial Media Converter (SC,SM)
IPOE-175	Industrial IP67 1 Port 60W 802.3bt PoE++ Injector (-40~75 degrees C)

Industrial Ethernet Media Converters

IGT-805AT	IP30 Industrial Gigabit SFP Media Converter
IGTP-805AT	IP30 Industrial Gigabit PoE + SFP Media Converter
IFT-802T	IP30 Industrial Fast Ethernet SC MM Slim Media Converter
IFT-805AT	IP30 Industrial Fast Ethernet SFP Slim Media Converter
IGT-1205AT	IP30 Industrial Gigabit 1 Port + 2 SFP Media Converter

Industrial Ethernet
All-Inclusive Integrated Industrial Ethernet Solution

Contact the Cablenet sales team for more information.

PART NO	DESCRIPTION

Media Converters

Fibre Optic Media Converters

FT801UK	Media Converter 10/100 - 100FX (ST) LFP MM
FT802UK	Media Converter 10/100 - 100FX (SC) LFP MM
FT802S15	Media Converter 10/100 - 100FX (SC) LFP SM 15km
GT-1205A	Media Converter Gigabit 10/100/1000 - 2 Port Giga SFP Redundent
GT802SUK	Media Converter Gigabit 10/100/1000 - 1000LX SM (SC)
GT802UK	Media Converter Gigabit 10/100/1000 - 1000SX MM (SC)
GT805A	Media Converter Gigabit 10/100/1000 - 1000SX GBIC Converter
GT905A	Media Converter Gigabit 10/100/1000 - 1000SX GBIC Managed
GTP805A	Media Converter Gigabit PoE (802.3af) 10/100/1000 - GBIC (SFP)
XT715A	Media Converter 10GBASE-T to 10GBASE-X SFP+ (Copper Port Supports 2.5G/5G/10Gbps data rate)
XT905A	Managed Media Converter 1-Port 10G/5G/2.5G/1G/100BASE-T + 1-Port 10G/1GBASE-X SFP+
XT915A	Managed Media Converter 2-Port 10G/1GBASE-X SFP+
XT925A	Managed Media Converter 1-Port 10G/5G/2.5G/1G/100Base-T + 2-Port 10G/1GBASE-X SFP+
MC700	Media Converter Chassis 7 Slot
MC-RPS130	130w Redundant Power Supply for MC-1610MR/48
MC1500	Media Converter Chassis 19inch 15 Slot
MC1500R	Media Converter Chassis 19inch 15 Slot (AC Power)
MC15RPS130	130w Redundant Power Supply for MC1500R
54-9075	European Power Adaptor for (FT/GT) M/Con (5v-2.5Amp)

SFPS - Planet GBIC Modules

MGBLX	Planet SFP - Port 1000BASE-LX Mini-GBIC Module - 10km
MGBSX	Planet SFP - Port 1000BASE-SX Mini-GBIC Module - 550m
MGBSX2	Planet SFP - Port 1000BASE-SX Mini-GBIC Module 2km

Intelligent Power & Active Communications

The Evolvement of Optical Transceiver

The unceasing need for network speed and efficiency makes data centre a more demanding place, and optical transceivers also evolve to satisfy the need for higher density and larger capacity. The broad transceiver portfolio usually consists of the following types, customers could choose the right one based on the specific usage environments and speed needs.

SFP:	A wide range of protocols and rates (Fast Ethernet, Gigabit Ethernet, Fibre Channel, Sonet/SDH) which operate in either commercial or extended temperature environments.
SFP+:	Designed for 10G Ethernet and 10G Fibre Channels.
XFP:	Supporting a variety of 10Gbps protocols (Ethernet, Sonet/SDH, Fibre Channel).
X2:	10G Ethernet standard over a variety of distances.
SFP28:	Designed for 25G Ethernet.
QSFP+:	40 Gbps interfaces support 40G Ethernet and OTN standards over multimode or single mode fibre.
QSFP28:	100 Gbps interfaces support 1000G Ethernet and OTN standards over multimode or single mode fibre

PART NO	DESCRIPTION
EnGenius	
Access Points	
FitCon100	EnGenius Managed Desktop Controller for up to 100 FIT devices
EWS377-FIT	Managed/Standalone Indoor 11ax 4x4 Access point - Ceiling mount
EWS850-FIT	Managed/Standalone Outdoor Dual Band 11ax 2x2 2.5Gb Access point
ECW336	EnGenius Managed Indoor 11ax 4x4 Access Point - Indoorwith 6GHz radio
ECW220S	Managed Indoor 11ax 2x2 Access Point with scanning radio and BLE
ECW230S	Managed Indoor 11ax 4x4 Access Point with scanning radio and BLE
ECW215	EnGenius Managed Indoor Access point Wallplate - Wi-Fi 6 (11ax)
ECW220	EnGenius Managed Indoor 11ax 2x2 Access point - Ceiling mount
ECW230	EnGenius Managed Indoor 11ax 4x4 Access point - Ceiling mount
ECW120	EnGenius Managed Indoor 11ac 2x2 Outdoor Access Point
ECW130	EnGenius Managed Indoor Dual Band 11ac 4x4 Wifi5 High Density Access Point
ECW260	EnGenius Managed Outdoor IP67 11ax 2x2 Access point - Omni-directional
ECW270	Cloud Managed Outdoor IP67 11ax 4x4 Access Point - Omni Directional
PoE+ Switch	
EWS2910P-FIT	Managed/Standalone Desktop 8-port GbE 55WSwitch (PoE+)with 2x SFP
EWS7928P-FIT	EnGenius Managed/Standalone 19i 24port 185W Switch (PoE+) with 4x SFP
EWS7928FP-FIT	EnGenius Managed/Standalone 19i 24port 410W Switch (PoE+) with 4x SFP
EWS7952P-FIT	EnGenius Managed/Standalone 19i 48-port 410W Switch (PoE+)with 4x SFP
EWS7952FP-FIT	EnGenius Managed/Standalone 19i 48-port 710W Switch (PoE+)with 4x SFP
ECS1008P	EnGenius Managed/Standalone Desktop 8-port 55W GbE Switch (PoE)
ECS1112FP	Managed/Standalone 13i 8-port 130W GbE Switch (PoE+)with 2x SFP
ECS1528P	Managed/Standalone 19i 24-port 240W GbE Switch (PoE+)with 4x SFP+
ECS1528FP	Managed/Standalone 19i 24-port 410W GbE Switch (PoE+)with 4x SFP+
ECS1552P	EnGenius Managed 19i 48-port 410W GbE Switch (PoE+)with 4x SFP+
ECS1552FP	EnGenius Managed 19i 48-port 740W GbE Switch (PoE+)with 4x SFP+
ECS2510FP	EnGenius Managed/Standalone 13i 8-port 2.5Gb PoESwitch (PoE+) 2x SFP+
ECS2512FP	Managed/Standalone 13i 8-port 2.5Gb 240W PoE.bt Switch (PoE++) 4x SFP+
ECS2528FP	EnGenius Managed/Standalone 19i 24-port 410W GbE Switch (PoE+)
ECS5512FP	Managed/Standalone 13i 8-port 10Gb 420W PoE.bt Switch (PoE+) 4x SFP+
ECS5512F	EnGenius Managed/Standalone 19" 1/2 rack 12-port SFP+ Switch
ESG510	EnGenius Managed Indoor Security Gateway

PART NO	DESCRIPTION
Networking Transceivers	
25G MultiMode SFP28	
CN-SFP28-SR-HP	25G MultiMode SFP28 100m LC HP/Aruba Compatible
25G MultiMode SFP29	
CN-SFP28-SR-CIS	25G MultiMode SFP28 100m LC Cisco Compatible
25G MultiMode SFP30	
CN-SFP28-SR-JUN	25G MultiMode SFP28 100m LC Juniper Compatible
10G MultiMode SR SFP+	
CN-SFP-10G-SR-HP	10G MultiMode SR SFP+ 300m LC HP/Aruba Compatible
CN-SFP-10G-SR-CIS	10G MultiMode SR SFP+ 300m LC Cisco Compatible
CN-SFP-10G-SR-JUN	10G MultiMode SR SFP+ 300m LC Juniper Compatible
CN-SFP-10G-SR-GEN	10G MultiMode SR SFP+ 300m LC Generic Compatible
Please Specify Manufacturer	
10G SingleMode LR SFP+	
CN-SFP-10G-LR-HP	10G SingleMode LR SFP+ 10km LC HP/Aruba Compatible
CN-SFP-10G-LR-CIS	10G SingleMode LR SFP+ 10km LC Cisco Compatible
CN-SFP-10G-LR-JUN	10G SingleMode LR SFP+ 10km LC Juniper Compatible
CN-SFP-10G-LR-GEN	10G SingleMode LR SFP+ 10km LC Generic Compatible
Please Specify Manufacturer	

Tel. 01276 405300   **Email.** sales@cablenet.co.uk   **Web.** www.cablenet.co.uk

Intelligent Power & Active Communications

PART NO	DESCRIPTION
10G Copper RJ45	
CN-SFP-10G-T-HP	10G Copper RJ45 30m HP/Aruba Compatible
CN-SFP-10G-T-CIS	10G Copper RJ45 30m Cisco Compatible
CN-SFP-10G-T-JUN	10G Copper RJ45 30m Juniper Compatible
CN-SFP-10G-T-GEN	10G Copper RJ45 30m Generic Compatible
Please Specify Manufacturer	
1G MultiMode SX	
CN-SFP-1G-SX-HP	1G MultiMode SX SFP 550m LC HP/Aruba Compatible
CN-SFP-1G-SX-CIS	1G MultiMode SX SFP 550m LC Cisco Compatible
CN-SFP-1G-SX-JUN	1G MultiMode SX SFP 550m LC Juniper Compatible
CN-SFP-1G-SX-GEN	1G MultiMode SX SFP 550m LC Generic Compatible
Please Specify Manufacturer	
1G SingleMode SX	
CN-SFP-1G-LX-HP	1G SingleMode LX SFP 10km LC HP/Aruba Compatible
CN-SFP-1G-LX-CIS	1G SingleMode LX SFP 10km LC Cisco Compatible
CN-SFP-1G-LX-JUN	1G SingleMode LX SFP 10km LC Juniper Compatible
CN-SFP-1G-LX-GEN	1G SingleMode LX SFP 10km LC Generic Compatible
Please Specify Manufacturer	
1G Copper RJ45	
CN-SFP-T-HP	1G Copper RJ45 100m HP/Aruba Compatible
1G Copper RJ46	
CN-SFP-T-CIS	1G Copper RJ45 100m Cisco Compatible
1G Copper RJ47	
CN -SFP-T-JUN	1G Copper RJ45 100m Juniper Compatible
1G Copper RJ48	
CN-SFP-T-GEN	1G Copper RJ45 100m Generic Compatible
Please Specify Manufacturer	

* All our transceivers can be encoded to ensure compatibility with your equipment vendor.

PART NO	DESCRIPTION
Direct Attach Cables	
10G Cisco Compatible	
CN-DAC-10G-1-CIS	10G Direct Attach Cable 1m Cisco Compatible
CN-DAC-10G-2-CIS	10G Direct Attach Cable 2m Cisco Compatible
CN-DAC-10G-3-CIS	10G Direct Attach Cable 3m Cisco Compatible
CN-DAC-10G-5-CIS	10G Direct Attach Cable 5m Cisco Compatible
10G HP/Aruba Compatible	
CN-DAC-10G-1-HP	10G Direct Attach Cable 1m HP/Aruba Compatible
CN-DAC-10G-2-HP	10G Direct Attach Cable 2m HP/Aruba Compatible
CN-DAC-10G-3-HP	10G Direct Attach Cable 3m HP/Aruba Compatible
CN-DAC-10G-5-HP	10G Direct Attach Cable 5m HP/Aruba Compatible
10G Juniper Compatible	
CN-DAC-10G-1-JUN	10G Direct Attach Cable 1m Juniper Compatible
CN-DAC-10G-2-JUN	10G Direct Attach Cable 2m Juniper Compatible
CN-DAC-10G-3-JUN	10G Direct Attach Cable 3m Juniper Compatible
CN-DAC-10G-5-JUN	10G Direct Attach Cable 5m Juniper Compatible
Please Specify Manufacturer	
10G	
CN-DAC-10G-1-GEN	10G Direct Attach Cable 1m Generic Compaitable
CN-DAC-10G-2-GEN	10G Direct Attach Cable 2m Generic Compaitable
CN-DAC-10G-3-GEN	10G Direct Attach Cable 3m Generic Compaitable
CN-DAC-10G-5-GEN	10G Direct Attach Cable 5m Generic Compaitable

** All our attach cables can be encoded to ensure compatibility with your equipment vendor.
Attach cable products can be dual coded to support mixed vendor environments upon request.

Please contact our sales team for the latest **25G/40G** and **100G** Modules

Introducing our NEW Range of PoE++ Compliant Network Patch Leads

Eighteen months ago, we decided to amend the specification of all our Category 6 and Category 6a Network Patch leads to ensure compliance with the PoE++ standards.

This amendment required us to change the core components used in our cables to a PoE++ certified cable and IEC 60603-7 RJ45 connectors that use our "Full Gold"* RJ45. It has taken us these last eighteen months to cleanse all our old stock and replace it with compliant cables, and we are now pleased to launch our range.

Power over Ethernet Applications

All our cables can be used with the current IEEE 802.3 PoE Standards, including 15W PoE (IEEE 802.3af), 30W PoE+ (IEEE 802.3at), 60W PoE++ (IEEE 802.3bt Type 3), and 100W PoE++ (IEEE 802.3bt Type 4), and still fully backwards compatible with all current networks.

The table below summarizes the different types of IEEE 802.3 standards:

Type	Standard	PSE min. input power	PD guaranteed min. power	Cable category	Max. cable length	Number of pairs
Type 1	IEEE 802.3af	15.4 W	12.95 W	Cat5e	100m	2 pairs
Type 2	IEEE 802.3at	30 W	25.5 W	Cat5e	100m	2 pairs
Type 3	IEEE 802.3bt	60 W	51 W – 60 W*	Cat5e and above	100m	2 pairs class 0-4 4 pairs class 0-4 4 pairs class 5-6
Type 4	IEEE 802.3bt	90 W	71 W – 90 W*	Cat5e and above	100m	4 pairs class 7-8

* Provides power at the destination of 60 W for Type 3 and 90 W for Type 4, if the cable length is known (<100m)

This will ensure PoE++ performance, and the critical compliance standards include:

- Reference to UL 1863 1000V (vs 500V) listing needed for higher levels (Type 3 and 4) of PoE.
- Compliance to IEC60603-7-2011, point 6.6.1 meets the minimum insertion and removal of RJ45 is 750 times and 2500 times for PL2, which only 50µm gold-plated RJ45 connectors can provide.
- The Federal Communications Commission (FCC) has clear regulations on the gold plating thickness of RJ45 contacts - a qualified RJ45 should be constructed using only 50µm gold-plated contacts.

Summary

In summary, the influence of the RJ45's gold plating thickness on the application of PoE++ is reflected in reduced electrical resistance, heat dissipation, corrosion resistance, and wear resistance. When designing and deploying PoE++ systems, choosing a 50µm gold-plated RJ45 connector is important to ensure system performance, reliability, and economic benefits.

As you can imagine, using an increased gold plating layer can increase costs; in summary, when designing and deploying PoE++ systems, you must choose the best-performing cable.

We have managed these performance improvements without any cost increase to ensure your PoE++ systems can meet the higher current and capacity requirements PoE++ requires.

Many of our PoE++ Network Patch Leads are available in our **ESG Bulk Packaging** options.

ESG PRODUCT

ESG - Environmental, Social and Governance

Introducing our ESG Bulk Pack Product offering to help overcome environmental challenges associated with packaging

At Cablenet, an industry-leading computer and network cabling supplier, we have pledged to become more sustainable and eliminate as much packaging as possible, including single-use plastics and packaging of any type. This is in line with our goal to minimise packaging altogether.

At Cablenet, we have a phased approach to introducing ESG (environmental, social and governance) products that reduce packaging, beginning with introducing network patch leads and fibre leads. This demonstrates our dedication to making significant strides in promoting efficient packaging practices and encourages customers to support us on our ESG mission by buying these ESG products in bulk where possible. Customers will contribute to substantially reducing their packaging waste and decrease transportation-related emissions.

Managing Director Peter Pearson stated, *"Sustainability is no longer a choice; it is a necessity in business. At Cablenet, we understand the growing importance of environmental considerations. Our ESG products, rather than merely being part of the sales patter or "greenwashing" are a tangible action and commitment for customers seeking suppliers committed to sustainability benefits for their industries."*

Cablenet continuously adapts to industry needs while staying true to our core values. We believe it is our duty and corporate responsibility to minimise our industry's contribution to landfill sites.

The bulk packaging option is included in our portfolio of products. It is available through our website search option, so look for the ESG product logo and join us in our goal of a greener and more environmentally conscious future.

Look for the ESG Product logo throughout this product guide

DataCentre Products

Inside this section...

Specifying the Correct Cabinet...

Choosing a cabinet

What to consider:

✓ **A.** The height   ✓ **B.** The U Space   ✓ **C.** The width   ✓ **D.** The depth

With the above in mind you need to consider the internal versus external measurements. For instance, the internal height of a 42U height cabinet is 1867mm and the external height is 1999mm.

All standard cabinets have industry standard 19" mounting angles. This internal measurement is 483mm. The external dimensions can be either 600mm or 800mm. In most instances 600mm is the most common for server racks and 800mm for cabling racks allowing for cable management each side of the rack.

U height is 1.76" imperial and 44.45mm metric.

Plinths & Castors

The Cabinet comes with "traveling" castors only to be used when the cabinet is EMPTY. Castors are only really needed if the cabinet needs to be moved often. In this instance you would need heavy duty castors to be added to the bill of materials. Plinths are available in two options. As either a "skirt" for the bottom of the cabinet to help optimise airflow, or as an extendable plinth. Extendable plinths are recommended for use in cabinets that have an uneven weight distribution, as they aid the stabilisation of a cabinet with the use of an extending arm that pulls out of the plinth like a draw.

Do you need a PDU (Power Distribution Unit)?

How many servers/switches you need to attach to the PDU and what type of outlets i.e. C13/C19 or BS1363 (UK socket) and quantity of each. This will determine how many sockets are required on your PDU. Depending on the position and the number of connectors required in your cabinet will also determine if your PDU needs to be mounted horizontally or vertically.

Shelves

Shelves come in two options, fixed or cantilever. Fixed shelves are mounted at the front and rear of the cabinet for heavy equipment, 30kg+. Cantilever are mounted on the front mounting angles only and have a maximum weight capacity of 20kg. Depending on depth and weight of equipment being mounted will determine the type of shelf you require.

Mounting Angles & Support Rails

Mounting Angles are fixed at a standard width size of 19", these mounting angles are attached to the front and rear of the cabinet and are adjustable to accommodate the equipment being housed.

Cabling

Think about cable management - to make sure your cables don't get mixed up. Jumper rings and panels stop harmful strain (stretch) on your cabling - essential for a tidy solution.

Options & Extras

- Earth bonding kits aids earth continuity between the frame, doors and the top cover of the cabinet to help prevent risk of electrocution.

- Earth bonding kits provide enough leads for all the panels on a cabinet to be bonded to the main frame.

- Don't worry about fans unless the cabinet is going to be very full.

- A baying kit is used to join 2 adjacent server cabinets for better stability.

- A document wallet will keep all your important documents close to hand.

- "U" measuring strip will help you level up and space your equipment when bolting it into the cabinet. There is nothing worse than struggling to bolt something in, only to find that it's not level and you need to start again.

Fibre Types

Singlemode cables can be found in OS2 type. Multimode cables can be found in OM1, OM2, OM3, OM4 and OM5 types. Each type has different properties.

OS2 Singlemode Fibre

Unless requested otherwise all singlemode fibre cables they will conform to ITU-T G652.D. This standard describes the geometrical, mechanical and transmission attributes of the cable and ensures that the cable can be used in the operating wavelengths around 1310nm and 1550nm.

Also, in higher fibre density environments fibre with tighter cable routing and reduced bend radius there is another standard G.657.A1 and or G.657.A2. Cables meeting either of these standards are often referred to as Bend Insensitive (BI) or Reduce Bend Sensitive (RBS) fibre cable. All G.652.D, G.657.A1 and G.657.A2 all have the same physical size with internal and external core diameters of 9µm and 125µm, respectively, are completely compatible with each other and G.652 and G.657 are compatible with all standard connectors such as LC, SC, MU, and E2000 in UPC or APC polishes.

OM5 Multimode Fibre

OM5 New Standard developed when you are using Shortwave Wavelength Division Multiplexing (SWDM) applications. For 10 Gigabit and 100 Gigabit Ethernet it only transmits at the same distance as the low cost OM3 and OM4 Fibre. It has a suggested jacket colour of Lime Green. OM5 fibre, also known as WBMMF (wideband multimode fibre) at a minimum speed of 28Gbps per channel through the 850-953 nm window.

OM4 Multimode Fibre

It is a further improvement to OM3, uses a 50µm core and was developed specifically for VSCEL laser transmission and allows 10 Gigabit Ethernet up to 550m compared to 300M with OM3 and 100 Gigabit Ethernet at lengths up to 150 meters. Often supplied in a jacket colour of Erika Violet to differentiate it from OM3 . It is completely backwards compatible with OM3 fibre.

OM3 Multimode Fibre

Its core size is 50µm, but the cable is optimized for laser based equipment that uses fewer modes of light. As a result of this optimization, it is capable of running 10 Gigabit Ethernet at lengths up to 300 meters. Since its inception, production techniques have improved the overall capabilities of OM3 to enable its use with 40 Gigabit and 100 Gigabit Ethernet up to 100 meters. It has a suggested jacket colour of aqua.

Ethernet Cabling Guidelines

	Multimode Fibre OM3	Multimode Fibre OM4	Multimode Fibre OM5	Singlemode Fibre OS2 1310mm	Singlemode Fibre OS2 1550mm
10BASE-T (10Mb/s)	2000m	2000m		N/S	N/S
100BASE-T (100Mb/s)	2000m	2000m		N/S	N/S
1000BASE-T (GbE)	550m	1000m		5000m	N/S
10GBASE-T (10GbE)	300m	550m	400m	10000m	40000m
40GBASE-T (40GbE)	100m	100m	150m	10000m	40000m
100GBASE-T (100GbE)	100m	150m	150m	10000m	40000m

N/S = Not Specified

IEEE Standard	Application	Fibre Type	Baud Rate (GBd)	Transmission Type	# of λ's	# of Fibres	Distance (metres)	Connector
802.3cm	400GBASE-SR8	Multimode	50	Parallel	NA	16	70 (OM3) 100 (OM4)	MPO-16/MPO-24
802.3cm	400GBASE-SR4.2	Multimode	50	Parallel/SWDM	2	8	70 (OM3) 100 (OM4) 150 (OM5)	MPO-8/MPO-12
802.3bs	400GBASE-DR4	Singlemode	100	Parallel	NA	8	500	MPO-8/MPO-12
802.3bs	400GBASE-FR8	Singlemode	50	WDM	8	2	2,000	Duplex
802.3cu	400GBASE-FR4	Singlemode	100	WDM	4	2	2,000	Duplex
802.3cu	400GBASE-LR4-6	Singlemode	100	WDM	4	2	6,000	Duplex
802.3bs	400GBASE-LR8	Singlemode	50	WDM	8	2	10,000	Duplex

Current IEEE 400 Gb/s Ethernet standards for the data center using QSFP-DD transceivers.

Fibre Optic Connectors

Unlike with copper cabling where one style of connector, the RJ45, dominates, with fibre there are a number of different connectors that can be used.

LC Connectors

The LC connector is sometimes referred to as a Small Form Factor (SFF) connector as it has much smaller dimensions than the SC connector. In fact it is possible to get twice as many fibres terminated on LC connectors in the space used by SC connectors. LC connectors have a simple latch, similar to that used on a RJ45 plug, making it familiar in use for network technicians. This has become the connector of choice in most new network fibre installations.

SC Connectors

The SC connector has a square format and has a push/pull latching mechanism. The image shows two SC connectors that have been joined using a special clip to create a SC Duplex connector with the A and B legs identified in the moulding of the clip.

ST Connectors

The ST connector has a round barrel and uses a bayonet fixing mechanism to secure it to the mating connector. It is not recommended for new installations and is only seen in legacy fibre deployments.

MPO/MTP® Connectors

The MPO/MTP® connector has larger dimensions than the LC Duplex connector but can accommodate up to 24 fibres in a single ferrule, making it ideal for high density installation. This style of connector is also finding favour in multi-channel fibre applications such as 40G and 100G Ethernet. However, the high precision nature of the connector means that it is not suitable for field termination.

LC Duplex, CS, SN, Comparison

Comparison of traditional LC to new small form factor CS and SN duplex connectors.

SN®-MT Connector

The SN-MT is a revolutionary Very Small Form Factor (VSFF) connector with 2.7 times the density of MPO connectors. The SN-MT incorporates a single, compact SN.-MT ferrule and is compatible with next-generation 200 µm rollable ribbon cables.

The SN-MT connector is innovating hyperscale data center connectivity by offering optimized densification, simplified network build, future-proofing capabilities, ultra-low loss, and other benefits. The connector boasts an exceptional packing density, accommodating 3,456 fibers per 1RU in patch panels. This high-density design optimizes space utilization within data centers. Furthermore, it simplifies network build by eliminating the need for cassettes and sliding trays. With the SN-MT16 Connector, deployment times are reduced, fewer connectors are needed in the link, and the overall build process becomes more streamlined.

It supports transceivers available for 4 x 800G. This capability allows data centers to keep pace with increasing bandwidth demands. With the SN-MT16 Connector, data centers can confidently scale their operations and adapt to evolving network requirements. The SN-MT16 Connector offers an ultra-low insertion loss of less than 0.35dB per mated connector pair, guaranteeing repeatable and reliable links. Its high-performance MT ferrules and alignment pins further improve reliability, ensuring stable connections and optimal network performance.

It features a push-pull boot, facilitating fast and effortless insertion and removal. Its flex angle boot provides superior bend protection and strain relief. The different keys on the upper and lower surfaces of the connector ensure repeatable and clear alignment upon insertion into the adapter, simplifying installation and reducing the risk of misalignment. It also incorporates multi-port shuttered adapters, offering increased ingress protection and enhancing laser safety for users. In addition to its performance benefits, the SN-MT16 Connector embraces sustainability by utilizing up to 67% less plastic. This eco-friendly design reduces the environmental footprint, aligning with the industry's growing commitment to sustainability.

SN Connector-Based Connectivity

The most commonly used connector types in the industry today are LC and MPO. The introduction of a new connector type, namely the SN connector, is set to have a profound impact on 400G. The SN interface has already been adopted in transceiver specifications of QSFP-DD and OSFP. These transceivers are the new specifications for the next generation of pluggable transceivers for 200Gbps, 400Gbps, and 800Gbps data centre interconnects (DCI). The SN connector is a new, duplex optical fibre connector that uses LC-style 1.25mm O.D. Zirconia ferrules, designed for the next generation Hyperscale, Edge, Enterprise, or Colocation data centres. The SN connector provides superior optical performance while reducing the typical number of connection points in the optical path. The SN connector was designed to provide individual and independent duplex fibre breakout at a quad-style transceiver (QSFP, QSFP-DD & OSFP) that is more efficient, reliable, and scalable than the MPO connector. The SFP-DD has also adopted the SN as their independent duo-style interface, mainly for wireless front-haul applications. Beyond transceiver interfaces, SN increases and improves the fibre density and capacity for the existing fibre optic cassettes and patch panels. Compared to the LC connector, SN provides three times higher density. This will further support the implementation of more fibres without adding new rack units.

CS Adaptors

CS Connectors and Adaptors allows operators to increase the density of fibre-optic connections in data centre and networks.

The CS adaptors will allow you to fit many more connectors in a smaller space with a mechanism for sealing out contaminants and keeping your fibre lines clean and clear. The CS connectors deliver high data rates and small form factors to fit dense installations. The new CS connectors are so space-conscious that they may allow you to double the density of your patch panels."

The CS adaptors, which L-Com describes as retrofittable, are suited for cabling providers or equipment manufacturers that want to upgrade their existing systems to SN density without redesigning new panels or hardware. "Each adaptor will double the density of many existing SC/LC-based hardware and thus reduce the total cost per port of the overall system," Users can benefit from much-reduced rack consumption and improve their rack-unit revenue efficiency." Single-channel (2 fibres), dual-channel (4 fibres), and quad-channel (8 fibres) versions. These adaptors can upgrade fibre management hardware from SC/LC, improving rack-space utilization in data centres, making high-density centralized cross connects and patch panels, and combining different connector types in mixed fibre panels."

The CS adaptors have built-in, automatic shutters that prevent contamination. "With the help of a visible light source through the adaptor sleeve, these devices make traceability of the adaptor effortless," These adaptors are available in single-channel (2 fibres), dual-channel (4 fibres), triple-channel (6 fibres), and quad-channel (8 fibres) versions. They are often used in data centres, medical, wireless, quantum-computing, onboard optics, and fibre-to-the-home applications.

The CS is a very small form factor (VSFF) connector, designed for high-density data centre and OSFP/QSFP-DD breakout applications. It provides a 40% size reduction compared to the LC duplex connector, which enables users to double the density of patch panels, L-Com pointed out. "They offer more room for cable management as well as better airflow within the rack," the company added. The CS comes with a 2-mm or 3-mm boot and an integrated push-pull tab. It is UPC-polished, contains two ferrules in a single housing, and supports single mode fibre.

"We aim to help our customers improve their fibre-optic connectivity with our new SN and CS adaptors and connectors," commented L-Com product line manager Paul Hospodar. "These product lines enable higher-density installations without the need for more space or having to redesign panels or hardware."

Patch Cable Types Explained

Single Mode OS2 Patch Cable

OS2 Patch Cables are made to provide bandwidth used in long distance transmission. They are 2.8mm Duplex Design with white strain relief boots and our standard LSOH jacket colour is Yellow. Each fibre cable is tested for insertion loss. Individual test results are provided.

10 Gigabit 50μm OM3 and OM4 Patch Cable

OM3 Patch Cables are made to provide bandwidth that will support transmission above 10 Gigabits and can be used for applications up to 300 metres. They are 2.8mm Duplex Design with white strain relief boots and our standard LSOH jacket colour is Aqua Blue. Each fibre cable is tested for insertion loss. Individual test results are provided.

OM4 Patch Cables are made to provide bandwidth that will support transmission above 10 Gigabits and can be used for applications up to 550 metres. They are 2.8mm Duplex Design with white strain relief boots and our standard LSOH jacket colour is Aqua Blue or Erika Violet. Each fibre cable is tested for insertion loss. Individual test results are provided.

Uniboot LC Reverse Polarity Patch Cable

We can offer Uniboot LC Single and Multimode fibre patch cords offer a compact design and with a few simple steps the connector polarity can be reversed without any connector re-termination. Single mode OS2 has a Yellow LSOH jacket and Multimode OM3 and OM4 fibre with an Aqua Blue Jacket. Each fibre cable is tested for insertion loss. Individual test results are provided.

What's the Difference Between UPC Endface & APC Endface?

An APC connector endface features an 8-degree angle to direct reflected light into the cladding where it does not propagate back to the transmitter, improving system performance for 400 Gb/s PAM4 applications.

UPC endface

APC endface

MPO/MTP

MPO/MTP (multi-fibre termination push-on) terminated cables are widely used in high-density data centres. The terms MPO and MTP are often used; however, MPO is the recognised fibre connector type, while MTP is a registered trademark of an MPO connector manufactured by US Conec. All MTPs are MPOs, but not all MPOs are MTPs. To the naked eye, there is little difference between the two connectors, and in cabling and transceiver interfaces, they are compatible with each other.

Note: MTP® is a registered trademark of US Conec Ltd. This is the term US Conec uses to describe their connectors. American Conec MTP products are fully compliant with MPO standards. Therefore, the MTP connector is a type of MPO connector.

MPO/MTP Design

MPO/MTP connectors are typically available with 8, 12, or 24 fibres, with 32, 48, 60, or 72 fibres available. However, these higher fibre counts are generally reserved for speciality super high-density multi-fibre arrays in large-scale optical switches.

MPO/MTP connectors are either male (with alignment pins) or female (without alignment pins). To join two MPO/MTP connectors together through an adapter, one connector must have alignment pins, and the other must not. The role of the alignment pins is to ensure that the fibres align perfectly, ensuring successful mating.

MPO/MTP connectors are often colour-coded to help contractors distinguish between the different fibre types and polish specifications for single mode. MPO/MTP connectors are made for both single-mode and multi-mode multi-fibre cables. The cable jacket is yellow in single-mode (OS2 applications), per Telecommunications Industry Association's (TIA) specification. The connector colour will vary depending on the connector type. Ultra-Physical Contact (UPC) connectors will also be yellow, while Angled Physical Contact (APC) connectors are green. With multi-mode OM3/OM4, both MPO/MTP connectors and cable jackets will be aqua, per TIA specifications.

MPO/MTP Connectors

Until recently, the primary method of connecting switches and servers within the data centre involved cabling organised around 12 or 24 fibres, typically using MPO/MTP connectors. The introduction of octal technology (eight switch lanes per switch port) enables data centres to match the increased number of ASIC I/Os (currently 256 per switch ASIC) with optical ports. Fibre cable manufacturers quickly reacted to this new dilemma and started to develop "Base-8" solutions. These new systems migrated the base unit of fibre bundles from 12 fibres to 8 fibres, and MPO/MTP cabling systems started to emerge based on 8 fibre MPO/MTP and trunk cables in multiples of 8 fibres.

New Base-8 and 16-fibre configurations support eight server connections using eight fibres to transmit and eight fibres to receive. MPO/MTP 16-fibre connectors are keyed differently to prevent connection with the 12-fibre MPO/MTP connectors.

The next speeds have now emerged as 400G. There will likely be minimal adoption of multi-mode fibre cabling, which will utilise an SR8 solution – 8 lanes of 50Gb/s and require a 16 fibre MPO/MTP connector. Base-8 infrastructure can support this 16-fibre solution by combining two Base-8 MPO/MTP connectors per link.

From a connectivity perspective, existing 8-fiber and 12-fiber MPO/MTP (Base-8/12) connectors will support 400 Gb/s 8-fibre applications, including 400GBASE-SR4.2 and 400GBASE-DR4. However, 16-fibre applications like 400GBASE-SR8 are now driving the need for 16-fiber MPO/MTP (Base-16) connectors, which have a different form factor from the Base-8/12 with an offset key.

MPO/MTP CONNECTORS IN THE CHANNEL

Base-8/12 | 12-fibre MPO/MTP   Base-24 | 24-fibre MPO/MTP   Base-16 | 16-fibre MPO/MTP

MPO/MTP Polarity

Achieving polarity is another challenge with MPO/MTPs. Polarity defines the direction of the light path or flow and is called the A-B-Cs of fibre polarity. This is more complex with multi-fibre MPO/MTP cables and connectors. Industry-standard TIA-568.3-D names three different polarity methods for MPO/MTPs: Method A, Method B, and Method C. Each method uses different types of MPO/MTP cables.

When examining a typical 12 fibre configuration, Method A uses a key-up connector on one end and a key-down connector on the other end so that the fibre located in Position 1 arrives at Position 1 at the other end. Method B uses key-up connectors on both ends to achieve the transceiver-receiver flip so that the fibre located in Position 1 arrives at Position 12 at the opposite end, the fibre located in Position 2 arrives at Position 11 at the opposite end, and so on.

Method C uses a key up connector on one end and a key down on the other end like Method A, but the flip happens within the cable itself where each pair of fibres is flipped so that the fibre in Position 1 arrives at Position 2 at the opposite end, and the fibre in Position 2 arrives at Position 1.

Whichever method is chosen, polarity needs to be consistent.

How Can You Master Polarity?

Following the release of the ANSI/TIA-568.3-E, Optical Fiber Cabling and Components Standard, users have seen the addition of two new connectivity (polarity) methods for array (MPO)-based duplex applications. The revision also introduced revised guidance on pinning of connectors to better support future transition to end-to-end array systems.

Prior to the release of this revision of the standard, connectivity methods for array-based duplex applications were limited to Methods A, B & C – each having its own strengths and weaknesses. ANSI/TIA-568.3-E introduced two new "universal" methods: U1 and U2. The advantage of these new methods is having the commonality components of Method B without the need for unique MTP-to-LC modules on each end. Customers can now use the same MPO-to-LC modules and duplex patch cords on either end of the channel in conjunction with a Type-B trunk – thus simplifying deployments.

Methods U1 and U2 both use Type-B array trunks and A-to-B duplex patch cords. Where they differ is Method U1 uses Type-A (Key-Up to Key-Down) array adapters and Type-U1 fiber transitions which Method U2 uses Type-B (Key-Up to Key-Up) array adapters and Type-U2 fiber transitions as show below in Table 1 and Figure 1:

Table 1: New Duplex Connectivity Methods

Connectivity Method	Array Trunk Cable	Array Adaptor	Fibre Transition	Duplex Patch Cord
U1	Type-B	Type-A	Type-U1	A-to-B
U2		Type-B	Type-U2	

Figure 1: Connectivity Method 1

What Is Base-8 and 16 MPO/MTP Cabling?

As we forward through the evolution of Ethernet speeds for enterprise applications, with the migration of Ethernet speeds from 10Gb/s to 40Gb/, the IEEE802.3 standard launched the next Ethernet speed of 40Gb/s as a parallel transmission of four lanes of 10Gb/s (40GBASE-SR4), meaning that a single 40Gb/s fibre port on a switch would transmit and receive four separate lanes of 10Gb/s across 4 pairs of fibres. The standard transmission protocol had shifted from a legacy 2-fibre duplex system (one transmit and one receive) to an 8-fibre system (four transmits and four receives), and Base-8 was born.

These new 40Gb/s transceivers, called QSFP+ (Quad Small Form-factor Pluggable), had an MPO/MTP as the connector interface, utilising a standard Base-12 fibre connector but leaving the four middle connectors dark. Fibre cable manufacturers quickly reacted to this new dilemma and developed "Base-8" solutions. These new systems migrated the base unit of fibre bundles from 12 fibres to 8 fibres, and MPO/MTP cabling systems started to emerge based on 8-fibre MPO/MTP and trunk cables in multiples of 8 fibres.

The 100GBASE-SR4 standard utilised 4 lanes of 25Gb/s across 4 pairs of fibres, a further migration to 100Gb/s using Base-8 fibre cables and further strengthening the case for Base-8 connections.

The next speeds have now emerged as 400G. There will likely be minimal adoption on multi-mode fibre cabling, utilising an SR8 solution – 8 lanes of 50Gb/s and requiring a 16 fibre MPO/MTP connector. Base-8 infrastructure can support this 16-fibre solution by combining two Base-8 MPO/MTP connectors per link. The vast majority of 400G systems will run over single-mode fibre with either multiple wavelengths across a duplex fibre connection or four lanes of 100G transmitted across four pairs of fibres – again utilising Base-8 cabling.

From a connectivity perspective, existing 8-fiber and 12-fiber MPO/MTP (Base-8/12) connectors will support 400 Gb/s 8-fibre applications, including 400GBASE-SR4.2 and 400GBASE-DR4. However, 16-fibre applications like 400GBASESR8 are now driving the need for 16-fiber MPO/MTP (Base-16) connectors, which have a different form factor from the Base-8/12 with an offset key. While 24-fibre MPO/MTP connectors can be used for 16-fibre applications, their larger form factor and eight unused fibres make the Base-16 a more cost-effective solution.

While 100 GBd rate will enable 400 Gb/s over eight fibres supported via Base-8/12 connectors, future 800 Gb/s applications will sustain the need for Base-16 connectors. The IEC is currently working on specifications for Base-16 connectivity, and the IEEE Beyond 400 Gb/s Ethernet Study Group is looking to standardise on the Base-16 for future 800GBASE-SR8 and 800GBASE-DR8 applications.

The variety of connector technology options provides more ways to break out and distribute the additional capacity that octal modules offer. Connectors include parallel 8-, 12-, 16- and 24-fiber multi-push on (MPO/MTP) and duplex fibre LC, SN, MDC and CS connectors.

What Is Base-12 and 24 MPO/MTP Cabling?

Since manufacturers first produced fibre-optic cables, they came in multiples of twelve fibres. Cable fibre counts were commonly 12, 24, 48, 96, and 144, leading to systems around fibre optic cables also based on 12 fibres. For example, patch panels are typically based on multiples of 12, 24, 48, and 144, and network switches are generally based on multiples of 24.

The first MPO/MTP connector was with 12 fibres, and when in 1996, IBM introduced the first fibre cabling system based on 36, 72 and 144 fibre trunks terminated with 12 fibre MPO/MTP connectors. This system allowed the flexibility of being able to connect different "harness" types of assemblies to an MPO/MTP connector which fanned out to the duplex connection required by the equipment at the end of the cable, securely set on the magic number of 12!

As we forward through the evolution of Ethernet speeds for enterprise applications, with the migration of Ethernet speeds from 10Gb/s to 40Gb/s, there is a fundamental shift in transmission modes and the basis of fibre systems. The IEEE802.3 standard launched the next Ethernet speed of 40Gb/s as a parallel transmission of four lanes of 10Gb/s (40GBASE-SR4), meaning that a single 40Gb/s fibre port on a switch would transmit and receive four distinct lanes of 10Gb/s across 4 pairs of fibres. The standard transmission protocol had shifted from a legacy 2 fibre duplex system (one transmit and one receive) to an 8-fibre system (four transmit and four receive), and Base-8 was born.

A Base-12 MPO/MTP cabling uses fibre optical links based on increments of 12 fibres and 12-fibre MPO/MTP fibre optic connectors. Base-12 and or Base-24 are mainstream in MPO/MTP cabling systems.

A Base-24 MPO/MTP trunk can be used in a channel with both parallel transceivers at the uplink and duplex transceivers at the downlink. This configuration could be used to breakout 100 Gb/s to 25 Gb/s or 400 Gb/s to 100Gb/s in the future, without making any changes to the cabling system. The graphic below shows one channel breakout, three times the number of links that can be supported with the same cassettes and Base-24 trunk when fully populated. Alternate configurations are possible with other cabling schemes. Alternate configurations are possible with Base-8 or Base-12, using additional trunk cables to support an equivalent number of connections.

8-Fibre Channel Breakout with a Base-24 MPO Trunk

Classification of Ethernet Standards and Transceiver Types

Speed	Ethernet Nomenclature	Ethernet Standard IEEE	Medium	Transceiver Form Factor	Connector Interface	Link Reach
10GbE (10Gb/s)	10GBASE-SR	802.3ae-2002 (CL49/52)	Multimode Fiber (@850nm)	SFP+, XENPAK X2, XPAK, XFP	LC Duplex SC Duplex	OM1 – 33m OM2 – 82m OM3 – 300m OM4 – 400m
	10GBASE-LR		Single-mode Fiber (@1310nm)	SFP+, XENPAK X2, XPAK, XFP	LC Duplex SC Duplex	OS2 – 10km
	10GBASE-ER		Single-mode Fiber (@1550nm)	SFP+, XENPAK X2, XFP	LC Duplex SC Duplex	OS2 – 40km
25GbE (25Gb/s)	25GBASE-SR	802.3by-2016 (CL112)	Multi-mode Fiber (@850nm)	SFP28	LC Duplex	OM3 – 70m OM4 – 100m
	25GBASE-LR	802.3cc-2017 (CL114)	Single-mode Fiber (@1310nm)			OS2 – 10km
	25GBASE-ER	802.3cc-2017 (CL114)	Single-mode Fiber (@1550nm)			OS2 – 40km
40GbE (40Gb/s)	40GBASE-SR4	802.3ba-2010 (CL82/86)	Multimode Fiber (@850nm)	CFP, QSFP+	MPO	OM3 – 100m OM4 – 150m
	40GBASE-LR4	802.3ba-2010 (CL82/87)	Single-mode Fiber (WDM)	CFP, QSFP+	LC Duplex	OS2 – 10km
	40GBASE-ER4	802.3bm-2015 (CL82/87)	Single-mode Fiber (WDM)	QSFP+	LC Duplex	OS2 – 40km
100GbE (100Gb/s)	100GBASE-SR10	802.3ba-2010 (CL82/86)	Multimode Fiber (@850nm)	CXP, CFP, CFP2 CFP4, CPAK	MPO (2x12)	OM3 – 100m OM4 – 150m
	100GBASE-PSM4	Proprietary (non-IEEE) (Jan 2014)	Single-mode Fiber (@1310nm)	QSFP28, CFP4	MPO 12	OS2-500m
	100GBASE-CWDM4	Proprietary (non-IEEE) (Mar 2014)	Single-mode Fiber (WDM)	QSFP28, CFP2 CFP4	LC Duplex	OS2-2km
	100GBASE-SR2-BiDi (Bi-directional)	Proprietary (non-IEEE)	Multimode Fiber (@850nm @900nm) (WDM)	QSFP28	LC Duplex	OM3 – 70m OM4 – 100m
	100G-SWDM4	Proprietary (non-IEEE) (Jun 2016)	Wide Band Multimode Fiber (SWDM)	SFP	LC Duplex	OM5 – 150m
	100GBASE-LR4	802.3ba-2010 (CL88)	Single-mode Fiber (WDM)	QSFP28, CFP CFP2, CFP4, CPAK	LC Duplex SC Duplex	OS2 – 10km
	100GBASE-SR4	802.3bm-2015 (CL95)	Multimode Fiber (@850nm)	QSFP28, CFP2 CFP4, CPAK	MPO 12	OM3 – 70m OM4 – 100m
	100GBASE-ER4	802.3ba-2010 (CL88)	Single-mode Fiber (WDM)	QSFP28, CFP CFP2	LC Duplex SC Duplex	OS2 – 40km
400GbE (400Gb/s)	400GBASE-SR8	802.3cm	Multimode Fiber (@850nm)	OSFP, QSFP-DD	MPO (16) MPO (2x12)	OM3 – 70m OM4 – 100m OM5 - 100m
	400GBASE-DR4	802.3bs	Single-mode Fiber (WDM)	CFP8, OSFP QSFP-DD	MPO 12 SN Connector	OS2 – 500m
	400GBASE-FR4	802.3cu	Single-mode Fiber (WDM)	CFP8, OSFP QSFP-DD	LC Duplex	OS2 – 2km
	400GBASE-2FR4 (2 x 200G-FR4)	802.3bs	Single-mode Fiber (WDM)	QSFP-DD, OSFP	CS Connector	OS2 – 2km

Small Form Factor

The deployment of 400G in the hyperscale market will be supported mostly by QSFP-DD (Quad Small Form-Factor Pluggable – Double Density) transceivers. The interface of a QSFP-DD connector also has 8 electrical lanes running at 50Gb/s each for a total bandwidth of 400Gb/s. The QSFP-DD form factor is similar to the QSFP form factor, except a second row of electrical contacts has been added to double the number of high-speed electrical lanes from 4 to 8.

The IEEE standard has defined a number of different 400G specifications for different industry applications, as listed in Table 2.1. The letters are reach specifications and the number refers to the number of optical channels:

1. **SR8:** "SR" refers to 100m reach using multimode fiber and "8" indicates there are 8 optical channels. Each of the 8 optical channels from an SR8 cassette is carried on separate fibers, resulting in a total of 16 fibers (8 Tx and 8 Rx). Each optical channel operates at 50Gb/s. The SR8 cassette uses an MPO-16 connector to connect to 8 fiber pairs or an MPO-24 connector as shown in Figure 2.2

2. **DR4:** "DR" refers to 500m reach using SMF and "4" indicates there are 4 optical channels. Each of the 4 optical channels from a DR4 cassette is carried on separate fibers, resulting in a total of 8 fibers (4 Tx and 4 Rx). Each optical channel operates at 100Gb/s. The DR4 cassette uses an MPO-12 connector to connect to 4 fiber pairs.

3. **FR4:** "FR" refers to 2km reach using SMF and "4" indicates there are 4 optical channels. Unlike the DR4 and SR8, all 4 optical channels from an FR4 are multiplexed onto one fiber, resulting in a total of 2 fibers from the cassette (1 Tx and 1 Rx). Each optical channel operates at 100Gb/s. The FR4 cassette uses a duplex LC connector to connect to a single fiber pair.

4. **2FR4:** The "2FR4" refers to 2 x 200G-FR4 links and has a reach of 2km using SMF. Each of the 200G FR4 links has 4 optical channels, multiplexed onto one fiber pair (1 Tx and 1 Rx per 200G link). A 400G-2FR4 cassette has 2 of these links, resulting in a total of two pairs of SMF (or 4 fibers total) and a total of 8 optical channels. Each optical channel operates at 50Gb/s. The 2FR4 cassette uses a dual CS connector to connect to 2 fiber pairs.

Today, hyperscale data centers use SMF with different connectivity to achieve up to 400G data rates. Some data centers use BASE-16 parallel optics (using 8 lanes of fiber to transmit and 8 lanes of fiber to receive with a 16f or 24f MPO connector) with QSFP-DR4 transceivers that use PAM4 modulation to achieve 400G transmissions. The data signal is modulated via PAM4 to 50G per fiber optic lane (cable). The use of 8 lanes translates to 400G data rates. Likewise, some hyperscale data centers use SMF with BASE-8 parallel optics, with QSFP-DR4 transceivers that use PAM4 modulation and advanced lasers to achieve 100G per lane and 400G per transceiver.

There have also been some developments with the new SN connector, a duplex optical fiber connector designed for 400G data center optimization. The SN has two LC-style 1.25-mm O.D. Zirconia ferrules in a single housing, pitched 3.1 mm apart versus 6.25 mm in an LC duplex. The SN connector allows users to have four connectors (eight fibers) in the QSFP-DD-based transceiver utilizing 400GBASE-DR4 standard.

For longer-distance 400G applications within hyperscale data centers, customers are deploying 400G-FR4, which allows for a reach of up to 2 km. The 400G-FR4 specification will utilize WDM and PAM4 modulation – transmitting 400G over a single lane of fiber, enabling the deployment of LC connectivity.

Table 2.1 on page 37 summarizes the key parameters for the different 400G transceivers. Note that in all the 400G transceivers, the electrical connector interface is always 8 x 50Gb/s PAM-4 (for a total of 400Gb/s). The optical signals, however, could be 8 x 50Gb/s PAM-4, or 4 x 100Gb/s PAM-4, depending on the type of cassette. For cassette that have 4 x 100Gb/s PAM-4 optical lanes, a gearbox chip inside the cassette converts the 8 x 50Gb/s PAM-4 electrical signals (from the board) to 4 x 100Gb/s PAM-4 signals required to modulate the optical signals.

Fibre Utilisation

Base-12 is more advantageous in high-density network cabling because it has more cores and higher density. However, Base-8 MPO/MTP cabling has better fibre utilisation than Base-12 MPO/MTP cabling. Although the Base-12 MPO/MTP cabling is still the most common choice for most data centre operators, there are still no standardised transceivers using all 12 fibres. Many popular transceivers (SR4 transceivers, for example), only use an 8-fibre interface. Base-8 MPO/MTP links allow customers to directly connect fibres to those transceivers without any fibre waste. If we use a 12-fibre connector into a transceiver which only requires eight fibres, which means that four fibres are unused. You may consider using a conversion cable to convert the Base-12 cabling to Base-8 cabling (two Base-12 to three Base-8, for example) to make use of all fibres. However, it will cause additional insertion loss, reducing the cable performance.

In addition, when using MPO/MTP to LC duplex breakout harnesses to connect to switch line cards, the Base-8 harnesses easily route to all common port count line cards, as all common line cards contain a number of ports wholly divisible by the number four (since a Base-8 harness provides four LC duplex connections). If you use Base-12 MPO/MTP to LC duplex breakout harnesses, you will get 6 LC duplex connections. But these harness cables can't fully connect to line cards with 16 or 32 ports since 16 and 32 are not wholly divisible by 6.

Therefore, for the sake of fibre utilisation, Base-8 MPO/MTP cabling is a better choice. Of course, if you don't mind the fibre wasting, Base-12 MPO/MTP cabling could also be selected.

For Future Cabling System

Base-12 and Base-8 MPO/MTP cabling can be seamlessly converted to Base-2 cabling in relatively smaller networks like 10G connections. Under such circumstances, either is feasible. However, for more extensive networks like 40G, 100G or even 400G connection, a Base-8 solution will gain more widespread market acceptance since a more significant number of 40G, and 100G circuits are deployed utilising eight-fibre transceivers. So do 400G direct connections, which use 400G QSFP-DD transceivers and MPO/MTP-16 trunk cables. In addition, the 8-fibre cabling could work with the 24-fibre cabling seamlessly since a single 24-fibre MPO/MTP could break out to three 8-fibre MPO/MTPs. Customers deploying 10G data rates today, can still deploy the Base-8 system since upgrading to a 40G or 100G circuit will be much simpler and more cost-effective. Base-12 connectivity is not optimal for 8- fibre transceiver systems.

QSFP Form Factor Transceivers

To support higher signalling rates, pluggable optical transceivers have also evolved. Iterations of QSFP transceiver modules have advanced from QSFP+ at a 10 GBd rate, to QSFP28 at a 25 GBd rate, and to QSFP56 at a 50 GBd rate. Equipped with a four-lane electrical interface, these transceivers enable 40, 100, and 200 Gb/s transmission respectively. The latest QSFP-DD form factor features an eight-lane interface, hence the DD designation for double density over existing four-lane QSFP form factors.

With the ability to support a 50 GBd rate, QSFP-DD transceivers support up to 400 Gb/s transmission, while enabling backwards compatibility with previous QSFP transceiver modules to avoid full active equipment replacement. Another eight-lane pluggable transceiver is the OSFP that also supports a 50 GBd rate but is not compatible with the QSFP form factor. The development of 100 GBd PAM4 is underway within the IEEE industry standards association to support higher speeds, but a 100 GBd rate has already been achieved by leveraging QSFP-DD transceivers and converting eight lanes of 50 Gb/s to four lanes of 100 Gb/s.

Just as the adoption of the QSFP28 form factor drove the adoption of 100G by offering high density and lower power consumption, the jump to 400G and 800G is being enabled by new transceiver form factors. The current SFP, SFP+ or QSFP+ optics are sufficient to enable 200G link speeds. However, making the jump to 400G will require doubling the density of the transceivers.

QSFP-Double Density (QSFP-DD7) and octal (2 times a quad) small form factor pluggable (OSFP8) Multi Source Agreements (MSAs) enable networks to double the number of electrical I/O connections to the ASIC. This not only allows summing more I/ Os to reach higher aggregate speeds, it also allows the total number of ASIC I/O connections to reach the network. The 1U switch form factor with 32 QSFP-DD ports matches 256 (32x8) ASIC I/Os. In this way, we can build high-speed links between switches (8*100 or 800G) but also have the ability to maintain the maximum number of connections.

The optical market for 400G is being driven by cost and performance as OEMs try to dial into the sweet spot of hyperscale and cloud scale data centers. In 2017, CFP8 became the first-generation 400G module form factor to be used in core routers and DWDM transport client interfaces. The CFP8 transceiver was the 400G form factor type specified by the CFP MSA. The module dimensions are slightly smaller than CFP2, while the optics support either CDAUI-16 (16x25G NRZ) or CDAUI-8 (8x50G PAM4) electrical I/O. As for bandwidth density, it respectively supports eight times and four times the bandwidth density of CFP and CFP2 transceiver.

Transceiver technology has advanced to support 50 Gb/s over a single lane, 200 Gb/s over four lanes, and 400 Gb/s over eight lanes.

Current Versus Future Network Configurations

Predictions – OSFP vs QSFP-DD

With regards to OSFP versus QSFP-DD, it's too early to tell which way the industry will go right now, both form factors are supported by leading data center Ethernet switch vendors and both have large customer support. Perhaps the enterprise will prefer QSFP-DD as an enhancement to current QSFP based optics. OSFP seems to be pushing the horizon with the introduction of OSFP-XD, extending the number of lanes to 16 with an eye toward 200G lane rates in the future. For speeds up to 100G, QSFP has become a go-to solution because of its size, power and cost advantage compared to duplex transceivers. QSFP-DD builds on this success and provides backwards compatibility which allows the use of QSFP transceivers in a switch with the new DD interface. Looking to the future, many believe that the 100G QSFP-DD footprint will be popular for years to come. OSFP technology may be favoured for DCI optical links or those specifically requiring higher power and more optical I/Os.

SN & MDC Connectors

Four SN and MDC small form factor duplex connectors fit into a single QSFP-DD transceiver to support 4X100 Gb/s breakout application in leaf-spine switch-to-switch links.

Note: MDC® is designed and manufactured by US Conec Ltd. The SN is designed and manufactured by Senko Advance Co Ltd (Japan).

DataCentre Products

PART NO	DESCRIPTION

Fibre Optic Patch Panels

Loaded OS2 Sliding Fibre Panel Black

XXFLPP24LC9	Loaded Fibre Patch Panel OS2 24 Fibre - 12 x LC Duplex
XXFLPP48LC9	Loaded Fibre Patch Panel OS2 48 Fibre - 24 x LC Duplex
XXFLPP96LC9	Loaded Fibre Patch Panel OS2 96 Fibre - 48 x LC Duplex

Loaded OM3/4 Sliding Fibre Panel Black

XXFLPP12LC4	Loaded Fibre Patch Panel OM3/4 12 Fibre - 6 x LC Duplex
XXFLPP24LC4	Loaded Fibre Patch Panel OM3/4 24 Fibre - 12 x LC Duplex
XXFLPP48LC4	Loaded Fibre Patch Panel OM3/4 48 Fibre - 24 x LC Duplex
XXFLPP96LC3	Loaded Fibre Patch Panel OM3/4 96 Fibre - 48 x LC Duplex

Configurable Fibre Patch Panels

FPP-1000	1U Configurable Fibre Patch Panel (Accepts Cassettes & Adaptor Plates)
FPP-1002	2U Configurable Fibre Patch Panel (Accepts Cassettes & Adaptor Plates)

1U 12 Port Fibre Patch Panel

FPP-2000	1U 12Port (Max 144F) Fibre Patch Panel (Only Accepts FPP-2001 & FPP2002 Cassettes)

MPO/MTP Fibre Cassettes

FPP-1010	12 Fibre OM3/4 (Aqua) LC MPO/MTP Fibre Cassette
FPP-1011	24 Fibre OM3/4 (Aqua) LC MPO/MTP Fibre Cassette
FPP-1012	12 Fibre OS2 (Blue) LC MPO/MTP Fibre Cassette
FPP-1013	24 Fibre OS2 (Blue) LC MPO/MTP Fibre Cassette
FPP-1021	12 Fibre Duplex OM3/4 (Aqua) LC Adaptor Plate
FPP-1022	24 Fibre Duplex OM3/4 (Aqua) LC Adaptor Plate
FPP-1023	12 Fibre Duplex OS2 (Blue) LC Adaptor Plate
FPP-1024	24 Fibre Duplex OS2 (Blue) LC Adaptor Plate
FPP-1025	6 Port MPO Adaptor Plate
FPP-1026	6 Port SC SX Adaptor Plate
FPP-1027	6 Port SC DX Adaptor Plate

PART NO	DESCRIPTION
FPP-1028	6 Port FC Adaptor Plate
FPP-1029	6 Port ST Adaptor Plate

Fibre Panel Adaptor Plates

FPP-2001	12 Fibre MPO/MTP OM4 Cassette to OM4 (Aqua) LC Adaptors
FPP-2002	12 Fibre MPO/MTP OS2 Cassette to OS2 (Blue) LC Adaptors

Please visit our website **cablenet.co.uk** to see our full range of Fibre Panel Adaptor Plates

Couplers & Accessories

PPLCSM	LC Duplex SM Coupler Blue
PPSCSM	SC Duplex SM Coupler Blue
PPLC	OM3/4 LC Duplex MM Coupler Beige
XXFALC3	OM3 LC Duplex Adaptor Aqua
XXFALC4	OM4 LC Duplex Adaptor Erika Violet
XXFASC3	OM3 SC Duplex Adaptor Aqua
SP-3A-10	Splice Protector 60mm x 2.5mm Dia (PK 100)

MPO 96 Fibre 1U Patch Panel

1U-19 inch MPO/MTP High-Density rack-mount fibre patch panel. Normally supplied pre-loaded with 4 pre-connected cassette modules with the maximum capacity of 96 fibres.

MPO 96 Fibre 1U Patch Panel BLACK

XXMPO9624LC4	96 Fibre Black Patch Panel 4 x 24 Fibre MPO/MTP OM4 Cassette to OM4 LC Adaptors
XXMPO9624LC9	96 Fibre Black Patch Panel 4 x 24 Fibre MPO/MTP OM4 Cassette to OS2 LC Adaptors
XXMPO9612LC4	96 Fibre Black Patch Panel 8 x 12 Fibre MPO/MTP OM4 Cassette to OM4 LC Adaptors
XXMPO9612LC9	96 Fibre Black Patch Panel 8 x 12 Fibre MPO/MTP OM4 Cassette to OS2 LC Adaptors

Tel. 01276 405300   **Email.** sales@cablenet.co.uk   **Web.** www.cablenet.co.uk

DataCentre Products

PART NO	DESCRIPTION

MPO CPR Breakout Cable

OM4 MPO CPR Breakout Cable AQUA

MPO-12BO4LC1	1m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12BO4LC2	2m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12BO4LC3	3m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12BO4LC5	5m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-12BO4LC10	10m OM4 MPO (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MPO-8BO4LC5	5m OM4 BASE-8 MPO (f) to 4X LC(DX) Breakout Aqua CPR Cable Method B
MPO-16BO4LC5	5m OM4 BASE-16 MPO (f) to 4X LC(DX) Breakout Aqua CPR Cable Method B
MPO-24BO4LC5	5m OM4 BASE-24 MPO (f) to 12X LC(DX) Breakout Aqua CPR Cable Method B

OS2 MPO CPR Breakout Cable YELLOW

MPO-12BO9LC1	1m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12BO9LC2	2m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12BO9LC3	3m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12BO9LC5	5m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-12BO9LC10	10m OS2 MPO (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MPO-8BO9LC5	5m OS2 BASE-8 MPO (f) to 4X LC(DX) Breakout Yellow CPR Cable Method B
MPO-16BO9LC5	5m OS2 BASE-16 MPO (f) to 4X LC(DX) Breakout Yellow CPR Cable Method B
MPO-24BO9LC5	5m OS2 BASE-24 MPO(f) to 12X LC(DX) Breakout Yellow CPR Cable Method B

MPO CPR Trunk Cable

OM4 MPO CPR Trunk Cable AQUA

MPO-12TC4MPO1	1m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MPO2	2m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MPO3	3m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MPO5	5m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B
MPO-12TC4MPO10	10m OM4 MPO (F) to MPO (F) Female 12F Aqua Cca Trunk Cable Method B

OM4 MPO CPR Trunk Cable ERIKA VIOLET

MPO-12TC4MPO1EV	1m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MPO2EV	2m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MPO3EV	3m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MPO5EV	5m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MPO10EV	10m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B
MPO-12TC4MPO15EV	15m OM4 BASE-12 MPO (F) to MPO (F) 12F Erika Violet Trunk CPR Cable Method B

PART NO	DESCRIPTION

OM4 MPO CPR Trunk Cable AQUA

MPO-8TC4MPO5	5m OM4 BASE-8 MPO (f) to MPO (f) 12F Aqua Trunk CPR Cable Method B
MPO-16TC4MPO5	5m OM4 BASE-16 MPO (f) to MPO (f) 16F Aqua Trunk CPR Cable Method B
MPO-24TC4MPO5	5m OM4 BASE-24 MPO(f) to MPO(f) 24F Aqua Trunk CPR Cable Method B

OS2 MPO CPR Trunk Cable YELLOW

MPO-12TC9MPO1	1m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MPO2	2m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MPO3	3m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MPO5	5m OS2 MPO (F) to MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-12TC9MPO10	10m OS2 MPO (F) - MPO (F) Female 12F Yellow Cca Trunk Cable Method B
MPO-8TC9MPO5	5m OS2 BASE-8 MPO (f) to MPO (f) 12F Yellow Trunk CPR Cable Method B
MPO-16TC9MPO5	5m OS2 BASE-16 MPO (f) to MPO (f) 16F Yellow Trunk CPR Cable Method B
MPO-24TC9MPO5	5m OS2 BASE-24 MPO(f)to MPO(f) 24F Yellow Trunk CPR Cable Method B

MTP CPR Breakout Cable

OM4 MTP CPR Breakout Cable AQUA

MTP-12BO4LC1	1m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12BO4LC2	2m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12BO4LC3	3m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12BO4LC5	5m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-12BO4LC10	10m OM4 MTP (F) to 4X LC (DX) QSFP Breakout Aqua Cca Cable Method B
MTP-8BO4LC5	5m OM4 BASE-8 MTP (f) to 4X LC(DX) Breakout Aqua CPR Cable Method B
MTP-16BO4LC5	5m OM4 BASE-16 MTP (f) to 8X LC(DX) Breakout Aqua CPR Cable Method B
MTP-24BO4LC5	5m OM4 BASE-24 MTP(f) to 12X LC(DX) Breakout Aqua CPR Cable Method B

OS2 MTP CPR Breakout Cable YELLOW

MTP-12BO9LC1	1m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12BO9LC2	2m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12BO9LC3	3m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12BO9LC5	5m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-12BO9LC10	10m OS2 MTP (F) to 4X LC (DX) QSFP Breakout Yellow Cca Cable Method B
MTP-8BO9LC5	5m OS2 BASE-8 MTP (f) to 4X LC(DX) Breakout Yellow CPR Cable Method B
MTP-16BO9LC5	5m OS2 BASE-16 MTP (f) to 8X LC(DX) Breakout Yellow CPR Cable Method B
MTP-24BO9LC5	5m OS2 BASE-24 MTP(f) to 12X LC(DX) Breakout Yellow CPR Cable Method B

DataCentre Products   MTP CPR Trunk Cable | MPO Breakout Cable | MPO Trunk Cable

PART NO	DESCRIPTION

MTP CPR Trunk Cable

OM4 MTP CPR Trunk Cable   AQUA

MTP-12TC4MTP1	1m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP2	2m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP3	3m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP5	5m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-12TC4MTP10	10m OM4 MTP (F) to MTP (F) Female 12F Aqua Cca Trunk Cable Method B
MTP-8TC4MTP5	5m OM4 BASE-8 MTP (f) to MTP (f) 12F Aqua CPR Trunk Cable Method B
MTP-16TC4MTP5	5m OM4 BASE-16 MTP (f) to MTP (f) 16F Aqua CPR Trunk Cable Method B
MTP-24TC4MTP5	5m OM4 BASE-24 MTP (f) to MTP (f) 24F Aqua CPR Trunk Cable Method B

OS2 MTP CPR Trunk Cable   YELLOW

MTP-12TC9MTP1	1m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP2	2m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP3	3m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP5	5m OS2 MTP (F) to MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-12TC9MTP10	10m OS2 MTP (F) - MTP (F) Female 12F Yellow Cca Trunk Cable Method B
MTP-8TC9MTP5	5m OS2 BASE-8 MTP (f) to MTP (f) 12F Yellow CPR Trunk Cable Method B
MTP-16TC9MTP5	5m OS2 BASE-16 MTP (f) to MTP (f) 16F Yellow CPR Trunk Cable Method B
MTP-24TC9MTP5	5m OS2 BASE-24 MTP (f) to MTP (f) 24F Yellow CPR Trunk Cable Method B

MPO Breakout Cable

OM3 MPO Breakout Cable   AQUA

MPO-F-4LCDX-OM3-01M	1m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-02M	2m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-03M	3m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-05M	5m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-10M	10m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM3-20M	20m OM3 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B

OM4 MPO Breakout Cable   AQUA

MPO-F-4LCDX-OM4-01M	1m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-02M	2m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-03M	3m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-05M	5m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-10M	10m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B
MPO-F-4LCDX-OM4-20M	20m OM4 MPO(f) to 4X LC(DX) QSFP Breakout Aqua Cable Method B

PART NO	DESCRIPTION

OS2 MPO Breakout Cable   YELLOW

MPO-F-4LCDX-OS2-01M	1m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-02M	2m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-03M	3m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-05M	5m OS2 MPO(f) to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-10M	10m OS2 MPO(f)to 4X LC(DX) QSFP Breakout Yellow Cable Method B
MPO-F-4LCDX-OS2-20M	20m OS2 MPO(f)to 4X LC(DX) QSFP Breakout Yellow Cable Method B

MPO Trunk Cable

OM3 MPO Trunk Cable   AQUA

MPO-FF-OM3-B-12-01M	1m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-1.5M	1.5m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-02M	2m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-03M	3m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-05M	5m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-7.5M	7.5m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-10M	10m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-15M	15m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-20M	20m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-25M	25m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-30M	30m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM3-B-12-50M	50m OM3 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B

OM4 MPO Trunk Cable   AQUA

MPO-FF-OM4-B-12-01M	1m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-1.5M	1.5m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-02M	2m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-03M	3m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-05M	5m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-7.5M	7.5m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-10M	10m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-15M	15m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-20M	20m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-25M	25m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-30M	30m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B
MPO-FF-OM4-B-12-50M	50m OM4 MPO (F) to MPO (F) Female 12 Fibre Aqua Trunk Cable- Method B

42RU Rack Comparison

Double your density with CS® CONNECTOR

Generic **LC**

with **LC**

Total Capacity

2048 CH

4096 F

(single sided rack/cabinet)

Total **7RU** Cable Management Space

CS® CONNECTOR

with **CS®**

Total Capacity

4352 CH

8704 F

(single sided rack/cabinet)

Total **13RU** Cable Management Space

40% size reduction compared to LC Duplex

4x **CS®** Duplex connector — 33mm

40% SPACE SAVING

4x **LC** Duplex connector — 54mm

PART NO	DESCRIPTION

OS2 MPO Trunk Cable `YELLOW`

MPO-FF-OS2-B-12-01M	1m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-02M	2m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-03M	3m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-05M	5m OS2 MPO (F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-10M	10m OS2 MPO(F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B
MPO-FF-OS2-B-12-20M	20m OS2 MPO(F) to MPO (F) Female 12 Fibre Yellow Trunk Cable-Method B

MPO to CS® Breakout Cable

OM4 MPO - CS® Breakout Cable

MPO-F-4CSDX-OM4-01M	1m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-02M	2m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-03M	3m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-05M	5m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-10M	10m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B
MPO-F-4CSDX-OM4-20M	20m OM4 MPO (F) to CS (DX) QSFP Breakout Aqua Cable Method B

OS2 MPO - CS® Breakout Cable

MPO-F-4CSDX-OS2-01M	1m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-02M	2m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-03M	3m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-05M	5m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-10M	10m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B
MPO-F-4CSDX-OS2-20M	20m OS2 MPO (F) to CS (DX) QSFP Breakout Cable Method B

Contact our sales team for details on the *NEW* **SN and MDC VSFF Connectors and Cable Assemblies** as these develop in 2024...

References: CS = Senko™ | SN and MDC = Senko™ and USConec.

DATACENTRE PRODUCTS

DataCentre Products   MPO to CS® Breakout Cable | MPO 1u White Fibre Patch Panel | Cat6a Copper Patch Panels | Cable Management

PART NO	DESCRIPTION

OM4 CS® - CS® Duplex Patch Leads

4CSCS1	1m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS2	2m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS3	3m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS5	5m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead
4CSCS10	10m OM4 50/125 CS-CS Duplex Aqua LSOH Fibre Patch Lead

OS2 CS® - CS® Duplex Patch Leads

9CSCS1	1m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS2	2m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS3	3m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS5	5m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead
9CSCS10	10m OS2 9/125 CS UPC - CS UPC Duplex LSOH Fibre Patch Lead

OM4 CS® - LC Duplex Patch Leads

4CSLC1	1m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC2	2m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC3	3m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC5	5m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead
4CSLC10	10m OM4 50/125 CS - LC (Uniboot) Aqua LSOH Fibre Patch Lead

OS2 CS® UPC - LC UPC Duplex Patch Leads

9CSLC1	1m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC2	2m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC3	3m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC5	5m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead
9CSLC10	10m OS2 9/125 CS UPC - LC UPC (Uniboot) LSOH Fibre Patch Lead

PART NO	DESCRIPTION

MPO 1u White Fibre Patch Panel

MPO 96 Fibre 1u Patch Panel WHITE

XXMPO9624LC4W	96 Fibre White Patch Panel 4 x 24 Fibre MPO/MTP OM4 Cassette to OM4 LC Adaptors
XXMPO9624LC9W	96 Fibre White Patch Panel 4 x 24 Fibre MPO/MTP OS2 Cassette to OS2 LC Adaptors
XXMPO9612LC4W	96 Fibre White Patch Panel 8 x 12 Fibre MPO/MTP OM4 Cassette to OM4 LC Adaptors
XXMPO9612LC9W	96 Fibre White Patch Panel 8 x 12 Fibre MPO/MTP OS2 Cassette to OS2 LC Adaptors

MPO 1152 Fibre 1u Patch Panel WHITE

XXMPO1152OM4W	1152 Fibre White Patch Panel 16 x 72 Fibre MPO/MTP OM4 Cassette to 64 OM4 MPO/MTP
XXMPO1152OS2W	1152 Fibre White Patch Panel 16 x 72 Fibre MPO/MTP OS2 Cassette to 64 OS2 MPO/MTP

Cat6a Copper Patch Panels

72-3760W	24 Port 1u Unloaded Keystone Patch Panel WHITE
72-3761W	48 Port 1u Unloaded Keystone Patch Panel WHITE
72-3759	Cat6a Shielded Keystone Shuttered Jack PoE+

Cable Management

72-2668W	1u 4 Ring Cable Tidy Panel WHITE
72-2601W	1u Toolless Blanking Panel WHITE
72-2680W	1u Brush Letterbox Cable Tidy Panel WHITE
52-3108W	Cage Nuts & Screws M6 WHITE (PK 50)

See our extensive range of copper & fibre
ETHERNET CABLES

In the **Network Patch Leads** section, page 9-32
and **Fibre Networking** section, page 59-80

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Terms & Conditions

Orders are accepted on condition that the following Conditions of Sale be accepted by the Customer to the exclusion of the Customer's conditions and any other conditions of sale or purchase and that in the event of re-sale the Customer undertakes the responsibility of ensuring that the ultimate purchaser is also fully acquainted with and accepts the said Conditions.

1. Preliminary: In these terms and conditions "the Terms" means these terms and conditions in full, "quotation" means any quotation supplied to the Customer by the Company, "tender" means any tender supplied to the Customer by the Company, "Customer" means the party placing an order for the supply of Goods with the Company, "the Goods" means cables supplied by the Company and/or any specified accessories or goods, "the Company" means Cablenet Trading Ltd, "Contract" means a contract for the supply of Goods from the Company to the Customer formed in accordance with clause 3.

2. Quotations and Tenders: All quotations and tenders are "ex-works" unless otherwise stated and are subject to a firm order being placed within 28 days unless otherwise stated. For the avoidance of doubt quotations and tenders submitted by the Company do not constitute an offer for the sale of Goods.

3. Basis of Sale:
(a) Each order for Goods shall constitute a separate offer to form a Contract. Orders may be made by the Customer in writing (including by email) or by telephone. Orders must be accompanied by sufficient information to enable the Company to proceed with the order forthwith. No order from the Customer shall constitute a binding contract for the supply of Goods.
(b) The Contract for the supply of Goods shall be made on the earlier of the date that the Company confirms the order to the Customer in writing (including confirmation by email) and the time when the Goods ordered are delivered to the Customer. Any variation of the Contract must be in writing and signed by the Company and the Customer.
(c) Unless firm prices are agreed in the order the Contract price is based upon the cost of materials, labour, transport, fuel and other relevant factors applying, and statutory obligations at the time of the tender or quotation, and if between that date and the date of actual delivery, variation either by rise or fall shall occur in these costs, then the Contract price shall be amended to provide for these variations.

4. Customer Requirements:
(a) When supplying Goods in respect of a particular purpose every endeavour is made to meet the requirements of Customers from the information supplied by them. As full information will be supplied at the request of the Customer regarding the manufacture and capabilities of the Goods no responsibility is accepted as to the suitability of any Goods, except under the terms of the Company's Guarantee (as defined within clause 16). Without prejudice to the generality of the foregoing the Company will furnish upon request data relating to the application or use of the Goods but the Company will not be responsible and does not assume any liability whatsoever for the damage of any kind sustained either directly or indirectly by any person in or through the adoption or use of such data in whole or in part.
(b) The Company reserves the right prior to delivery to effect minor modifications or changes to the Goods without notice without materially affecting the specifications or performance of the Goods. Any such modifications or changes shall not entitle the Customer to reject the Goods.

5. Cancellation:
(a) The Company reserves the right to cancel any Contract within 7 days of the order being accepted in accordance with clause 3 if one or more of the Goods ordered was listed or quoted at an incorrect price due to a typographical or other error or omission. If the Company cancels the Contract the Company will notify the Customer in writing and re-credit the Customer's account any sum deducted, charged or invoiced but in any event within 10 days of the cancellation.
(b) No order which has been accepted by the Company may be cancelled by the Customer accept with the agreement in writing of the Company and on terms that the Customer shall indemnify the Company in full against all loss (including loss of profit) costs (including the cost of all labour and materials used), damages, charges and expenses incurred by the Company as a result of cancellation.

6. Delivery and Completion Dates:
(a) In the event of either:
(i) The Company being delayed in or prevented from making delivery or completing the Contract owing to act of God, force majeure, war, civil disturbance, requisitioning, government or parliamentary restriction prohibition or enactment of any kind, import or export regulations, strike, lock-out, trade dispute, difficulty in obtaining workmen or materials, breakdown of machinery, shortage of fuel, fire, accident or any other cause whatsoever beyond the Company control; or
(ii) Non-delivery by the Company's suppliers, the Company shall be at liberty to cancel or suspend the Contract without incurring any liability for any loss or damage resulting therefrom.
(b) Whilst delivery and completion dates are given in good faith based upon information available to the Company at the time of quotation or tender, such dates are not guaranteed and the Company accepts no liability for delay (as defined in clause 6(a)(i)) in delivery or completion and no delay (as defined) shall entitle the Customer to reject any delivery or any further instalment or part of the order or to repudiate the Contract or the order or any part thereof or to claim any damages or compensation in respect of the said delay.

7. Delivery: Loss or Damage in Transit: When the Company delivers to the Customer, delivery will take place when the Goods are delivered to the Customer's premises or unloaded from transport whichever occurs last, and risk will thereupon pass to the Customer. When the Customer collects from the Company delivery will take place when the Goods are loaded on transport or leave the Company's works whichever occurs first, and risk will thereupon pass to the Customer.
The Company accepts no responsibility for any loss or damage to Goods, howsoever arising, after delivery has taken place. The Company accepts responsibility only for repair or replacement of damaged or lost Goods where the cause of damage or loss was the result of negligence of the Company's employee or agent. Customers are strongly advised to make suitable insurance arrangements in respect of goods in transit out of the Company's works. Claims in respect of loss or damage in transit should be made within 7 days of delivery.
Requests for proof of delivery must be made within 28 days of delivery.

8. Quantities: Whilst every endeavour will be made by the Company to deliver the exact quantity of Goods ordered, the Company reserves the right to deliver any quantity within 10% above or below the quantity ordered and to invoice the Customer for the quantity so delivered. Any claim that the quantity delivered is less than the quantity invoiced must be submitted to the Company within seven days of delivery.

9. Storage: If the Company does not receive forwarding instructions nor the Customer collect the Goods within five working days after notification to the Customer that the Goods are ready for delivery, the Customer shall arrange for storage at its own expense and risk, failing which the Company shall be at liberty to store or arrange for storage of the Goods at the Customer's expense and risk and the Goods shall be paid for by the Customer by reference to the time when the Goods are ready for delivery or are due to be delivered, whichever is the later. Any charges for storage or demurrage after delivery will be paid for by the Customer.

10. Packing: Where Goods are sold packed the extent of packing and/or protection will be at the discretion of the Company unless the Customer specifically requests special packing. The Customer is hereby informed that certain large items of equipment require special packing. In all instances the Customer will be charged extra for special packing.

11. Returns:
(a) Subject to the Customer obtaining prior written consent of the Company the Company may within 30 days of the date of delivery and in its sole discretion accept the return of such of the Goods supplied being surplus to the Customer's requirements and which shall not have been used or altered in any respect and shall be in the same condition as at the date of delivery.
(b) Where the Company has agreed to take any Goods by way of return such Goods shall be delivered to the Company within 2 days of the date specified by the Company. Credit shall be made by the Company in respect of the purchase value of the Goods so returned in the invoice submitted to the Customer for payment less a handling charge which sum shall be agreed between the Customer and the Company prior to any written consent to the return of such Goods by the Company.
(c) No Goods shall be accepted for return and no credit given in respect of the purchase value of the same where upon inspection by the Company the Goods are found to be in any way defective notwithstanding that prior written consent to the return shall have been given by the Company.

12. Title to Goods:
(a) Notwithstanding risk in the Goods passing in accordance with clause 7 hereof title in the Goods shall not pass to the Customer until payment is received by the Company in full for the Goods and there are no other amounts outstanding from the Customer to the Company.
(b) Before title has passed to the Customer under the terms of this clause and without prejudice to any of its other rights, the Company shall have the right to recover or re-sell the Goods or any of them and may enter upon the Customer's premises by its servants or agents for that purpose and in respect thereof the Customer shall take all reasonable precautions to protect the Goods from damage or loss arising from any cause and shall indicate that the Goods are the property of the Company.
(c) In the event of a sale of the Goods by the Customer in the ordinary course of its business to a third party the Customer shall assign to the Company in writing its rights to recover the selling price from the third party concerned if so required by the Company.
(d) As the insurable risk in the Goods shall pass to the Customer as soon as the materials are delivered to him or to his order and pending disposal of the Customer shall keep the Goods insured in the amount of the price at which the Goods are sold to the Customer against all insurable risks.
(e) If the Goods are destroyed by an insured risk prior to the same being paid for by the Customer, the Customer shall receive the proceeds of any such insurance as trustee for the Company.

13. Statutory Obligations: The Company will offer every co-operation in observing any such obligations but the responsibility for the observance of all obligations the performance of which is necessary to comply with the Law of the Country where the Goods are used or installed rests with the Customer who shall indemnify the Company against all claims arising under any such Act or by reason of non-compliance with any of the said obligations and against all costs and expenses arising from any such claim.

14. Payment: Prices quoted are net. Subject to credit being approved accounts are due for payment no later than 30 days from the last day of the calendar month in which delivery is made, otherwise payment must be received by the Company before delivery. When deliveries are spread over a period each consignment will be invoiced as despatched and each month's invoices will be treated as a separate account and be payable accordingly. The Company reserves the right to charge interest on all overdue accounts at three per cent above current bank rates. Failure to pay for any Goods or for any delivery or instalment shall entitle the Company to suspend further deliveries both on the same order and on any other order from the Customer without prejudice to any other right the Company may have. The Company reserves the right where a Customer fails to adhere strictly to the agreed credit terms or where genuine doubts arise as to a Customer's financial position to suspend delivery of any order or any part or instalment without liability until payments or satisfactory security for payment has been provided. Where Goods are to be delivered outside the U.K. payment must be made against delivery of the Goods or shipping documents f.o.b. U.K. Port unless credit arrangements approved by the Company have been made.

15. Licences etc: The Customer will be responsible in all instances for obtaining any necessary import licences and complying with all regulations governing admission of the Goods into the country of destination and for payment of all customs, duties, port duties and charges.

16. Guarantee: The Goods supplied by this Company are supplied with the following express guarantee: The Company takes all precautions to ensure the quality of Goods and materials and guarantees all Goods against faulty material for a period of twelve months from the date of delivery. The Company will repair or replace free of charge, any Goods that are, to the Company's reasonable satisfaction, shown to be defective within that period ('Guarantee'). The terms of this Guarantee apply only to the first owner/user of the Goods. The Company will in no circumstances accept responsibility for any defects whatsoever arising from misuse of any Goods or arising out of situations outside the control of the Company. Any claim under this Guarantee must be made within 30 days of discovery of the defect.

17. Restrictions on Company's Liability:
(a) Subject as aforesaid, all express or implied warranties, conditions, representations, undertakings or liabilities, whether imposed by statute, common law, custom or otherwise regarding damage or loss are hereby expressly excluded insofar that such matters are within the bounds of reasonableness and in the light of these terms and conditions; in particular, without impairing the generality of the foregoing, no statement or description contained in any catalogue or advertisement issued by the Company or any communication from the Company or made verbally or in writing by any of the Company's agents, representatives, officers or employees shall give or imply or be construed as giving or implying any such warranty, condition, representation, undertaking or liability as aforesaid nor shall such statement or description enlarge, vary or override or be construed to enlarge, vary or override in any way any of the conditions herein save that nothing in these Terms shall exclude the Company's liability for fraudulent misrepresentation.
(b) A claim in respect of any defect or failure to comply with the specification or order or in respect of any delivery or instalment of an order or any part thereof shall not entitle the Customer to cancel or refuse delivery of or payment for any other order, delivery or instalment or any part of the same order, delivery or instalment.
(c) The Company's liability in connection with the sale of Goods to the Customer shall be as follows:
(i) in respect of physical damage to the Customer's tangible property to the extent that it results from wilful default or negligence of the Company, its employees, agents or contractors, the Company's liability to be limited to an amount of £ 100.00 in respect of each incident or series of connected incidents; (ii) in respect of all other direct loss, or whether in contract, tort or otherwise, the Seller's liability shall not exceed £100.00; and

(iii) in respect of any loss of goodwill or any type of consequential, special or indirect loss or damage the Company's liability shall be nil.

(d) Nothing in these Terms excludes or limits liability of the Company for death or personal injury caused by the negligence and/or breach as set out in the Terms shall exclude or limit the liability of the Company for death or personal injury caused by the negligence of the Company.

18. Insolvency of Customer:

(a) This clause applies if:-

(i) the Customer makes any voluntary arrangement with its creditors or (being an individual or a firm) becomes bankrupt or (being a company) becomes subject to an administration order or goes into liquidation (otherwise than for the purposes of amalgamation or reconstruction); or

(ii) an encumbrancer takes possession of or a receiver is appointed over any of the property or assets of the Customer; or

(iii) the Customer ceases, or threatens to cease, to carry on the business, or the Company reasonably apprehends that any of the events mentioned above is met in relation to the Customer and notifies the Customer accordingly.

(b) If this clause applies then, without prejudice to any other right or remedy available to the Company, the Company shall be entitled to cancel the Contract and suspend any further deliveries under the Contract without any liability to the Customer, and if the Goods have been delivered but not paid for, all of the Company's outstanding invoices to the Customer become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary.

19. Legal Construction: The Contract shall in all respects be construed and operate as an English contract and shall be governed by English Law.

20. Notices etc: It is agreed between the parties' that:-

All communications between the parties shall be by means of email, facsimile transmission or by letter sent by first class ordinary post. The former shall be deemed to arrive at the time when transmission without any fault of the entire document is completed. The letter shall be deemed to arrive on the working day next after posting when posted within the UK and within 7 days of posting when posted outside the UK.

21. Sub-Contractors: The right is reserved by the Company to sub-contract all or any part of the Contract without prior notice to the Customer.

22. Third Party Rights: A person who is not a party to the Contract has no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of these Terms but this does not affect any right or remedy of a third party which exists or is available apart from that Act.

23. Severance: If any provision of these Terms is held by any competent authority to be invalid or unenforceable in whole or in part the validity of the other provisions of these Terms shall remain in full force and effect.

24. Waiver: The waiver by either party of the breach or default of any provisions of these Terms by the other party shall not be construed as a waiver of any succeeding breach of the same or other provisions, nor shall any delay or omission on the part of either party to exercise or avail itself of any right power or privilege that it has or may have whereunto operate as a waiver of any breach or default by the other party.

25. Data Protection Act 1998:

We may transfer information about you to our bankers/financiers for the purposes of providing services and for the following purposes:-

- Obtaining credit insurance
- Making credit reference agency searches
- Credit control
- Assessment & analysis (including credit scoring, market, product & statistical analysis)
- Securitisation
- Protecting our interests

We will provide you with details of our bankers/financiers & that of any credit reference agencies used on request.

Cablenet Trading Ltd. Registered in England No. 3342336

notes

CABLENET

2024 Product Guide

Network Patch Leads

Copper Networking

Fibre Networking

Power Leads & PDUs

Computer Cables, AV & Security

Intelligent Power & Active Communications

DataCentre Products

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You can also find us on:

in 𝕏

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