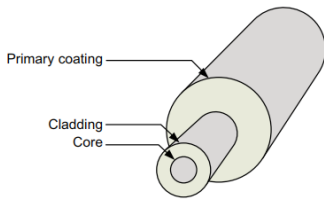


Excel Fibre Cabling Solution



Excel is a world-class premium performance end-to-end infrastructure solution – designed, manufactured, supported and delivered, without compromise.

Fibre optic refers to the medium that utilises light for the transmission of signals. Within the infrastructure data cabling environment this is predominately all-silica optical fibre cables. The other constructions include plastic optical fibre and plastic clad optical fibre. Fibre optic cabling can be split into two families – Multimode and Singlemode. ‘Mode’ means path, so the light travels down multi and single paths respectively.



The fibre core comprises of a core and a cladding. This cladding is then covered by a primary coating. The core is the medium that the light is transmitted along. The cladding is part of the manufacture of the glass. Typically, the cladding is of a consistent size for multimode and singlemode; namely 125µm. Likewise, the primary coating is usually 250µm for both multimode and singlemode. The primary coating can be coloured to differentiate between the cores within a cable.

Which fibre cable should I choose?

The following are Ethernet applications supported by different classes and categories of fibre optics and their maximum channel lengths:

Ethernet Application	Multimode					Ethernet Application	Singlemode	
	OM1	OM2	OM3	OM4	OM5		OS1	OS2
1000BASE-SX (Gb)	275m	550m	550m	1100m*	-	1000BASE-LX (Gb)	2,000m	5,000m
10GBASE-SR/SW (10 Gb)	32m	82m	300m	550m	-	10GBASE-LX4 & LR/LW (10 Gb)	2,000m	10,000m
40GBASE-SR4 (40 Gb)	-	-	100m	150m	150m	10GBASE-ER/EW (10 Gb)	2,000m	22,250m
100GBASE-SR10 (100 Gb)	-	-	100m	150m	150m	100GBASE-LR4 (100 Gb)	10,000m	10,000m
100GBASE-SR4 (100 Gb)	-	-	-	100m**	100m**	100GBASE-ER4 (100 Gb)	40,000m	40,000m

* distance specific to Excel fibre
** under development, correct at time of publication



Excel offers copper and fibre cabling products compliant to a wide range of application and EU member state requirements. Our sales and technical support teams have an extensive knowledge of CPR requirements and how the changes will impact our customers, so we are able to provide you with the right advice to ensure installations are fully compliant. All Declaration of Performance documents are available on the website labelled in accordance with the regulation and the cable's Euroclass is printed on outer sheath. Excel is ready to meet multiple Euroclass and country specific minimum requirements, from Eca through to B2ca. We have stock of unscreened and screened copper cables and multi and single mode fibre optic cables.

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