

# Optic Fibre Patchleads

**MEGANet™ LIGHTspeed Optic Fibre Patchleads are manufactured to give optimum optical performance in a single mode as well as multi mode application. LIGHTspeed patchcords are manufactured with Low Smoke Zero Halogen (LSZH) cable.**

Singlemode Patchleads are used for long haul telecom, high speed metropolitan and access networks. Multimode patchleads are used to connect high speed and legacy networks i.e. Gigabit Ethernet, Fast Ethernet and Ethernet. These patchleads conform to IEC, EIA TIA and Telecordia standards. For optimal performance, these leads are all terminated with premium quality connectors.



## FEATURES

Singlemode (OS1/OS2)	Multimode (OM2)	Multimode (OM3)
SC, LC, ST and FC	SC, LC, ST, FC and MTRJ connectors	SC, LC, ST, FC and MTRJ connectors
Low smoke zero halogen (LSZH)	Low smoke zero halogen (LSZH)	Low smoke zero halogen (LSZH)
900µm tight buffer	900µm tight buffer	900µm tight buffer
OS1/OS2 fibre conforms to ITU-652.D, TIA/EIA 492 CAAA	OM2 fibre conforms to ITU-651, TIA/EIA 492AAAB	OM3 fibre conforms to ITU-651, TIA/EIA 492AAAB
Simplex and duplex assemblies	Simplex and duplex assemblies	Simplex and duplex assemblies
Duplex assemblies available with clips (SC and LC)	Duplex assemblies available with clips (SC and LC)	Duplex assemblies available with clips (SC and LC)

## APPLICATIONS

Singlemode (OS1/OS2)	Multimode (OM2)	Multimode (OM3)
Operational in the entire 1260 nm to 1625 nm wavelength range	For use in 1 Gb/s high speed LAN networks over a 550 m	For use in 10 Gb/s high speed LAN networks over a 300 m length at 850 nm (SX) wavelength using a laser launch
Low chromatic dispersion in the 1310 nm operating window	High speed and legacy networks including Gigabit Ethernet, Fast Ethernet and Ethernet	For use in 1 Gb/s high speed LAN networks over a 1000 m length at 850 nm (SX) wavelength using a laser launch
Supports 1 GB/s up to an indicative 5 km in data networks	Data centres	High speed and legacy networks including Gigabit Ethernet, Fast Ethernet and Ethernet
Supports high speed multi channel video, data and voice services in metropolitan and access networks	Premises cabling in data networks including backbone, riser and horizontal	Data centres
	Supports video, data and voice services	Premises cabling in data networks including backbone, riser and horizontal
		Supports video, data and voice services





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## CONNECTOR SPECIFICATION

Optical Performance	Singlemode (OS1/OS2)	Multimode (OM2)	Multimode (OM3)	Conformance
Insertion loss (Typical)	0.25 dB	0.30 dB	0.30 dB	IEC 61300-3-4
Insertion loss (Ave/Master)	0.18 dB	0.15 dB	0.15 dB	IEC 61300-3-4
Insertion loss (Ave/Random)	0.18 dB	0.20 dB	0.20 dB	IEC 61300-3-34
Return loss	50/60 dB	-	-	IEC 61300-3-6

## CABLE SPECIFICATION

Characteristics	Singlemode (OS1/OS2)	Multimode (OM2)	Multimode (OM3)	Conformance
Cable sheath material	LSZH	LSZH	LSZH	IEC 60332-1 IEC 60332-3
Strength member	Aramid yarn	Aramid yarn	Aramid yarn	
Crush resistance	1000 N	1000 N	1000 N	
Operating Temperature	-20 to 60° C	-20 to 60° C	-20 to 60° C	

## FIBRE SPECIFICATION

Characteristics	Singlemode (OS1/OS2)	Multimode (OM2)	Multimode (OM3)
Attenuation (dB)	0.38 dB @ 1310 nm 0.25 dB @ 1550 nm	2.80 dB @ 850 nm 0.80 dB @ 1300 nm	2.80 dB @ 850 nm 0.80 dB @ 1300 nm
Bandwidth (MHz/km)	-	500 @ 850 nm 500 @ 1300 nm	1500 @ 850 nm 500 @ 1300 nm
Chromatic dispersion (ps/nm x km)	3.00 @ 1310 nm 18.00 @ 1550 nm	-	-

