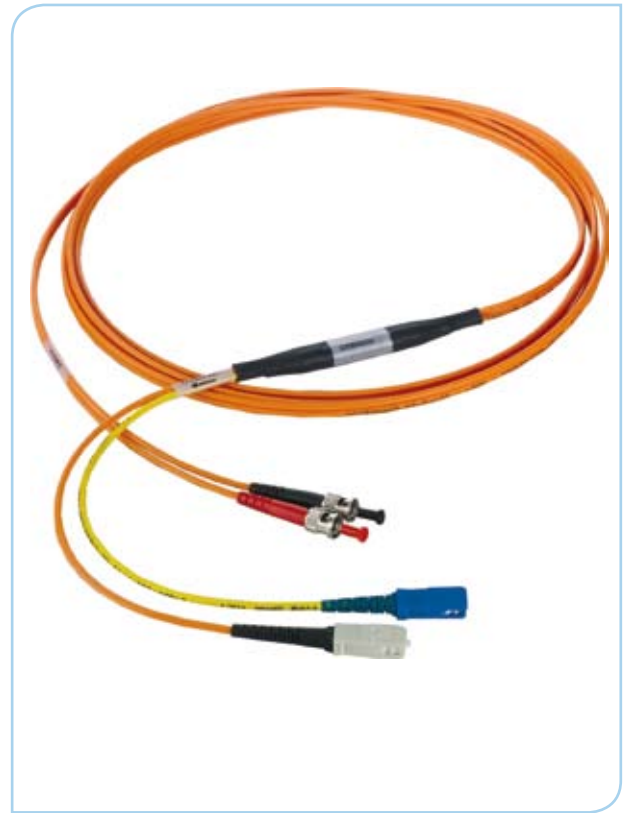


### Mode Conditioning Patchcord

It is known that multimode optical fibre links that use laser based transmitters may be limited in bandwidth to values less than half those of the over-filled launch bandwidth. The bandwidth is very low in the case of centre-launch condition. Optronics mode conditioning patchcords are specifically designed for launching your gigabit signal into the conventional 62.5/125 or 50/125 fibre with very high bandwidth. The Optronics mode conditioning patchcords can improve the transmission bandwidth by 3 to 4 times and also greatly reduces modal noise.

Today's Gigabit Ethernet Switches use VCSEL's, as the old technology LED emitters can not produce the signals required in these high bandwidth applications. The new mode conditioning assemblies are designed for use in 62.5/125 or 50/125 multimode fibre optic cabling systems, where these assemblies allow long wavelength 1300nm signals to be transmitted over good quality fibre at distances of up to 550m. The VCSEL devices used in Gigabit Ethernet applications are based on a singlemode launch condition and operate over both singlemode and multimode fibre.



### Features / Benefits

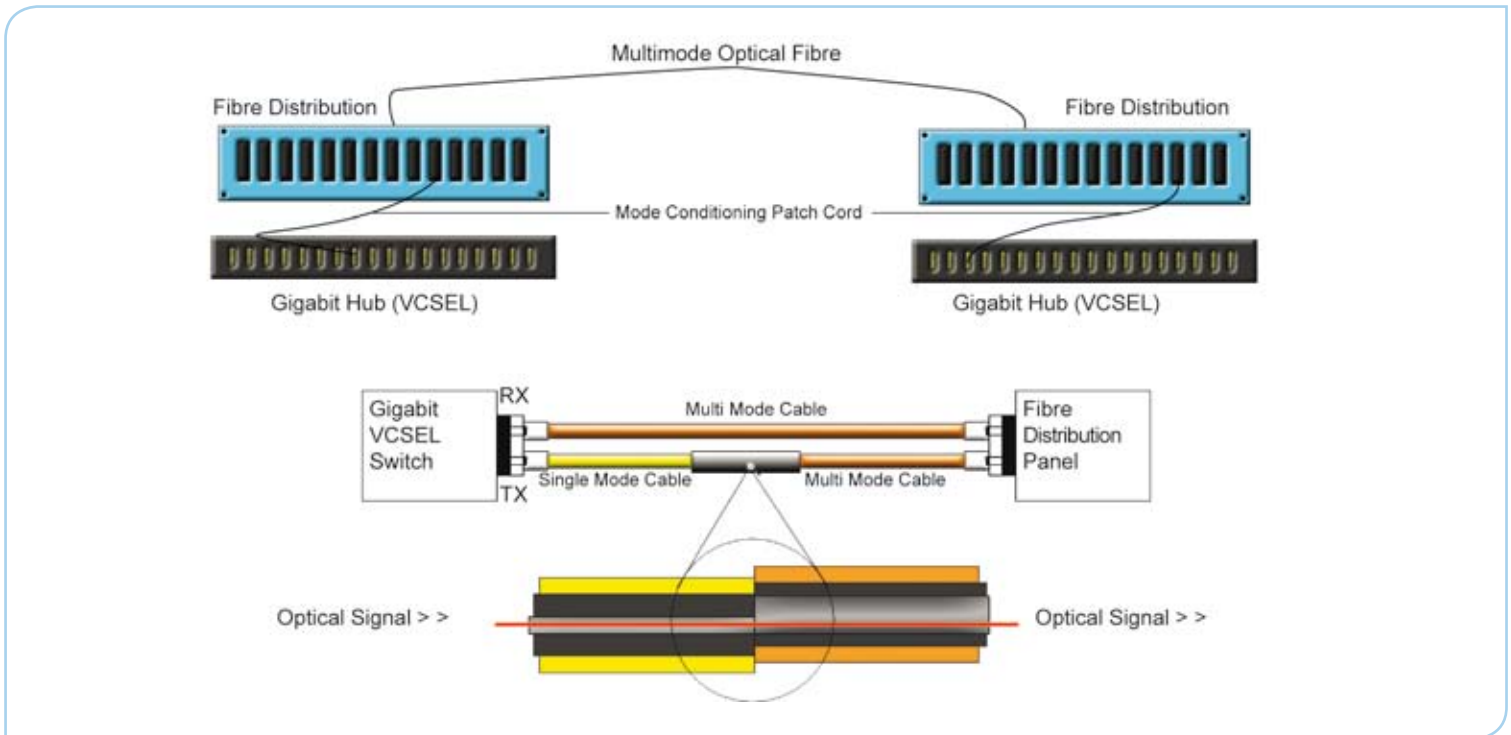
- > **Increased transmission bandwidth by as much as 4 times**
- > **Reduced modal noise**
- > **Low insertion loss (< 1dB)**
- > **Easy installation**
- > **Various connector options**

### Technical Specification

DESCRIPTION	62.5µm MMF	50µm MMF
Operating wavelength	1300nm	
Maximum insertion loss	0.5dB	
Coupled power ratio (CPR)	28 to 40dB	12 to 20dB
Back reflection S/M channel	30dB	
Back reflection M/M channel	20dB	
Connector finish	PC or APC	
Ferrule radius of curvature	10 to 25mm	
Fibre height	-50 to 50nm	
Maximum angular offset	1°	
Sheath colour	Orange (yellow for SM leg)	

DESCRIPTION	
Temperature Cycling	(IEC 61300-2-22) -40 to +75°C, 40 cycles =0.2dB Change
Damp Heat	(IEC 61300-2-19) 60°C at 95% RH, 96 hours =0.2dB Change
Vibration (Mated Pair)	(IEC 61300-2-1) 10-55 Hz, 1.5mm P to P =0.3dB Change
Mating Durability	(IEC 61300-2-2) 1000 mating cycles Clean every 25 < 0.2 dB Change
Operating Temperature	(IEC 61300-2-22) 40°C to +85°C

PATCHCORDS SPECIFICATIONS	
Connectors available	Types: FC, ST, SC, LC
Product Packaging	Each patchcord is packaged individually and individually identified for traceability, test certification is supplied for each assembly.
Length	2000mm ± 10mm Other lengths available to order



### Part Number Generator

