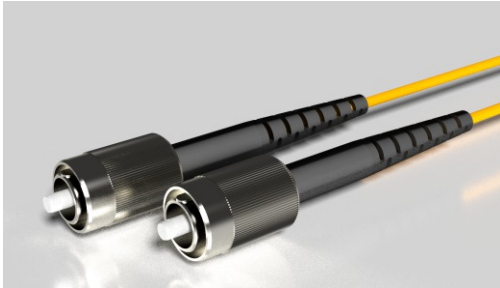




# Graded Index Multimode Patchcords

## Telcom and Data Applications



Multimode fiber optic patch cables (patch cords) with gradient index (GI) of refraction are offered in combination with FC, SMA905 (FSMA), SC, LC, ST, E2000, MPO / MTP® connectors. These patch cords are manufactured in custom lengths and designed for indoor as well as outdoor applications.

SQS's multimode fiber optic patch cables (patch cords) are designed for vacuum, industrial and military applications. The multimode fiber optic patch cables (patch cords) are offered with OM1, OM2, OM3 and OM4 fibers and their insertion loss is measured at 850 and 1310nm under condition of even light distribution over the fiber core.

As we possess technology for thin film layer deposition the ferrules' or capillaries' end faces can be offered with antireflection coatings. Anti-reflective coating (ARC) lowers typical reflectivity of about 5% down to about 0.1% depending on the requested wavelength range.

Parameters	Value	Measured at 850 and 1300nm; fiber core filling according to IEC 61280-4-1 standard.
Insertion Loss (max):	0,3dB	
Return Loss:	> 50dB	
Reparability (500 matings):	+/-0,1dB	
Operating temperature:	-40 +85°C	

Core Ø [µm]	Cladding [µm]	NA [-]	Fiber Type	λ range [nm]	Termination	Lose Tube	Patchcord length [m]	Ar Coating
50	125	0.22	OM2 non (BIF)	850 - 1310	FC/PC (**), SMA905, ST, SC, LC, MTP® Ferrule, Capillary, Fiber Array	Bare fiber 0.9 mm 2 mm (PVC) 3 mm (PVC) 3 mm (steel) 5 mm (steel)	0.1 - 10 m	reflectivity 0.1 - 0.5% λ range 355 - 1800 nm
50	125	0.22	OM2	850 - 1310				
50	125	0.22	OM3	850 - 1310				
50	125	0.22	OM4	850 - 1310				
62.5	125	0.22	OM1	850 - 1310				
100	125	0.22		850 - 1310				

\*) Narrow and wide key available

\*\*) Vacuum compatible connectors on request

### Minimum reach of Ethernet variants over multi-mode fiber

Category	Minimum modal bandwidth 850 nm / 1300 nm	Fast Ethernet 100BASE-FX	1 Gb (1000 Mb) Ethernet 1000BASE-SX	1 Gb (1000 Mb) Ethernet 1000BASE-LX	10 Gb Ethernet 10GBASE-SR	40 Gb Ethernet 40GBASE-SR4	100 Gb Ethernet 100GBASE-SR10
OM1 (62.5/125)	200 / 500 MHz-km	200 m	275 m	550 m (mode-conditioning patch cord required)	33 m	Not supported	Not supported
OM2 (50/125)	500 / 500 MHz-km				82 m	Not supported	Not supported
OM3 (50/125) *Laser Optimized*	1500 / 2000 MHz-km		550 m	550 m	300 m	100 m	100 m
OM4 (50/125) *Laser Optimized*	3500 / 4700 MHz-km				400 m	150 m	150 m

FC PC/APC Steel Jacket, 3mm or 900µm Tubing FC PC/APC 3mm Cable



FC PC/APC Stainless steel Jacket

