

Applications

MMC optical simplex patchcords are ideal for all singlemode and multimode applications. These patchcords are a part of the complete optical link and suit all type of networks, like Telecom, LAN (local Area Network), Wan Wide Area Network) and MAN (Metropolitan Area Network).

General Characteristics

- Optically and mechanically compatible with all the equivalent connectors.
- Optical patch cords with 4 connectors with ceramic ferrule (ZrO₂) and composite body (SC, LC) or metal (ST,FC)
- Simplex optical patch cords
- Simplex LSZH sheath with aramid yarns strength members (Kevlar-type)
- Individual test report and unit packaging
- Available in different lengths

Standards compliance

- IEC 60874-14, IEC 61754-2, -4, -4-7, -4-8, -13, -20, -20-7, -20-8,
- IEC 793, IEC 794-1-E1, IEC 794-1-E3,
- ITU-T G.651, ITU-T G.652D,
- UL 1666/901 (when UL cable is used and TIA/EIA 455)
- ISO/IEC 11801 2nd Ed. Ams 1.0, Amd 2.0
- JIS C5973 F04, ICEA-596
- Bellcore/Telcordia GR-326, GR-409-CORE
- TIA/EIA 604-3, TIA/EIA 568, EN 50173
- ROHS compliance on all components and final product,
- With no hazardous substances as detailed in ROHS 2002/95/EC



Optical UPC and APC simplex LSZH MM and SM patchcords

Patch cords general characteristics		
Temperature range	- 20°C to +60°C	
Mating cycles	> 500 cycles	
Colour of sheath	Yellow (OS2) Aqua (OM3) Erica Violet (OM4),	
Fiber version	3mm (standard) or 2mm (on demand)	
Colour of boots	Beige (Multimode) Blue (Singlemode) Green (APC)	
Return Loss	> 20dB (Multimode) and > 40dB (singlemode)	
Insertion Loss (Attenuation)	< 0.3 dB	

Connectors technical characteristics			
Types	ST, SC, LC, FC, MU (other on request)		
Material of ferrule	ZrO ₂ (Zirconia / Ceramic)		
Connector surface	Convex		
Fiber's connection	Ероху		
Material of body	Metal (ST, FC) or composite (SC, LC, MU)		
Ferrule drilling	125/126µm (Singlemode) and 127/128µm (Multimode)		

Optical cable mechanical properties		
Weight	15 kg/km	
Temperature range	-20°C to +60°C	
Bending radius	40 mm	
Tensile strength	250N (long term) – 450N (short term)	
Crush resistance	1000N/dm (OM1,OM2,OM3,OM4,OS2) 2000N/dm (OM4A)	

Optical cable performances						
Parameters		OM3	OM4	OS2		
Core diameter	μm	50	50	9		
Cladding diameter	μm	125	125	125		
Typ. Attenuation @ 850nm	dB/km	≤ 2.7	≤ 2.7	≤ 0.35		
Typ. Attenuation @ 1300nm	dB/km	≤ 0.8	≤ 0.8	≤ 0.22		
Bandwidth @ 850nm	MHz * km	> 1500	> 3500			
Bandwidth @ 1300nm	MHz * km	> 500	> 500			
EMB* @ 850nm	MHz * km	> 2000	> 4700			
Chromatic dispersion @1285-13300nm	Ps/(nm*km)			≤ 0.35		
Chromatic dispersion @ 1550nm	Ps/(nm*km)			≤ 0.22		

Ordering information	
Part Numbers structure	JxxX xxX yyy Szzz
Replace xx by the connectors left/right	Standard UPC connectors are : ST, SC, LC, MU (others on request)
Replace X by A for APC	Standard APC 8° connectors are: SC, LC, FC
Replace yyy by the length in meters	From 1 up to 100 meters
Replace zzzthe type of fiber	OM3, OM4, OS2

This document is confidential, and is the property of MMC. MMC own the copyright, and the document must not be copied or changed in any form, wholly or in part without written permission from MMC. The contents of this document must be disclosed to any other person or persons. The characteristics related to this document are not contractual, and can be modified without warning.