

Master FC Patchcord

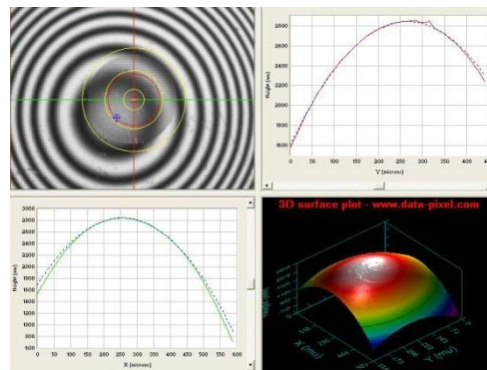
Description:

We offer an extensive range of pre-terminated cable assemblies that are 100% tested to ensure conformance with your specifications. These assemblies are used for measuring and manufacturing of fiber optic components and optical network testing.

The Master patchcord is equipped with a Master connector according to the specifications below. The master connector is marked and specified with its Serial Number, which ensures traceability of transmission and geometrical parameters. The second connector is a standard type. For the hybrid patchcord version different types of master and standard connector types are also available.



M-UPC/UPC-20S7A1



Interferometer testing

Specifications:		
Insertion loss ² (IL) (IEC 61300-3-4)	SM Ultra PC	SM Angle PC
	0.10 dB max	0.10 dB max
Return loss ² (RL) (IEC 61300-3-6, method 1)	≥ 55 dB ¹	≥ 70 dB ¹
PDL ²	max 0.1 dB	
Strain relief	max 100 N	
Allowable input power	max 1.0 W	
Strain relief	100 N	
Operating temperature	-30°C to +70°C	
Durability	min 1000 cycles	
Assembly procedure	glue and polish	
Connection	physical contact	
Lock mechanism	coupling nut	
Standards	JIS 5970, EIA/TIA FOCIS, IEC 61754-13, EN 50377-2, GR-326-CORE	
Ferrule material	full ceramic zirconia	
Connector material	zinc alloy, nickel plated	
Adapter material	zinc alloy, nickel plated, zirconia sleeve	
Connector lifetime	20 years in environment defined by EN 61753-1:2007, category C	
Geometrical parameters:		
Eccentricity of core for the center of ferrule	≤ 0.3 / 0.5 ⁵ µm	
Outer diameter of ferrule	2.5 mm connectors:	2.499 µm
	SFF connectors:	1.249 µm
End curve offset	≤ 25 µm	
Fiber height	-30 to +50 nm	
End curve radius: 2.5 mm connectors:	PC polishing: 10 – 18 mm	APC polishing: 5 – 12 mm
SFF connectors:	PC/APC: 5 – 12 mm	
APC angle	8 ± 0.1°	

Features:	Visual inspection:				
	Single mode				
	Allowable Defects and Scratches				
<ul style="list-style-type: none"> • ISO 9100 approved • 100% Return loss test • 100% Visual Inspection • 100% Insertion loss test • 100% Interferometric test • Manufactured to meet IEC/EN Standards • Batch traceability 	Zone	Description	Diameter	Defects (diameter)	Scratches (width)
	1a	Core Zone	0 to 25 μm	none	none
	1b	Cladding Zone	25 to 120 μm	any < 2 μm 5 from 2 - 5 μm none > 5 μm	none > 3 μm
	-	Adhesive Zone	120 to 130 μm	any	any
	2	Contact Zone	130 to 250 μm	none > 10 μm	any

Ordering code:

M - YYY / AAA - 20XXX - (LLL⁴) /02

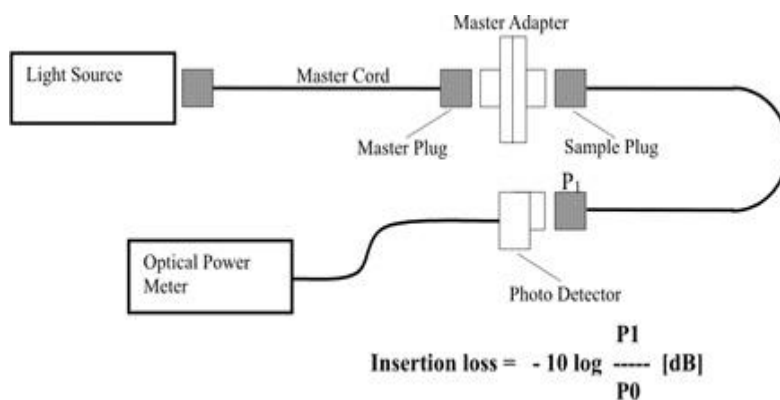
YYY – Master Connector
AAA³ – Second Connector
Type Description
UPC FC/UPC
NPC FC/APC

20 - cable \varnothing 2.0 mm
XXX - type of fiber
S2D SM 9/125 μm (G.652D)
S7A1 SM 9/125 μm (G.657A1)

- Note: 1) $RL \geq 58$ dB (UPC) and $RL \geq 78$ dB (APC) measured with low coherence reflectometry (IEC 61300-3-6 method 3 OLCR)
 2) Valid over 1260-1650 nm wavelength range and within operation temperature range -30 to +70°C, tested according to IEC 61300-3-12
 3) AAA – second connector types according to relevant datasheets
 4) Standard Master patchcord length – 2 m, other on demand
 However in case of longer Master patchcord Rayleigh scattering in glass produces small levels of back reflections. Because of backscatter, a link will produce intrinsic reflections which are dependent on the length.

IEC Test Method: Single mode:

IEC 61300-3-4, Insertion method (C2)



Note 5) Eccentricity of core

