

# MTP Patchcord

## Description:

The MTP patchcord provides quick connection specifically for multifiber cable, up to 24 fibers. The MTP connectors are designed for termination of ribbon fiber or loose individual fibers. Connection integrity is provided by the spring action side latch housing and alignment is achieved with high precision guide pins. The housing are colored-coded to differentiate single mode and multimode. Removable housing allow for quick change of pin clamps, ferrule cleaning or connector repolishing.



## Features:

- Multifiber cables termination
- Parallel optics transmission systems
- Single mode and Multimode applications
- Available angled and flat ferrule style
- Up to 24 fibers termination
- Push-on / Pull-off latching connector
- Easy connection and disconnection
- No need for matching material
- Fiber protrusion
- Low Insertion loss & Reflection
- Simple & Low cost
- IEC61754-7, TIA/EIA 604-5

## Application:

- Patchcords: Bare fiber ribbon type, ruggedized cable type or loose individual fibers cable
- Fan-out cord with single fiber connectors
- Parallel Optics transmission:
  - 40G and 100G IEEE 802.3
  - Optical Internetworking Forum (OIF) Compliant
  - QSFP, CXP, CFP, PSM4 standards

## Specifications:

		Single mode (angled 8°)	Multimode (flat)
Insertion Loss (dB)	Standard	0.25 typ, 0.75 max	0.20 typ, 0.60 max
	Premium	0.10 typ, 0.35 max	0.10 typ, 0.35 max
Optical Return Loss (dB)		> 60	> 20
Operating Temperature <sup>1</sup> (°C)		-10 to +60	
Durability		< 0.3 dB change (per EIA-455-21A) 500 remates	< 0.2 dB change (per EIA-455-21A) 1000 remates

Note:

- 1) relative to controlled environment  
uncontrolled environment -40 to +80 °C on request

## Connector colors:

SM Standard            green housing  
SM Premium            mustard (yellow) housing

MM OM1/OM2           beige housing  
MM OM3/OM4           aqua housing  
MM Premium            aqua housing

**Ordering code:**

**AAA - XX XXX - XX - (XX)<sup>2</sup> - (L2)<sup>3</sup> - L**

AAA	
Connector Type	Connector Description
NMTP XYZ	Angled
MTP XYZ	Flat
X – number of fibers (4, 8, 12, 16, 24)	
Y – Male (M) or Female (F)	
Z – Premium (P) or Standard (without mark)	

**(XX) – jacket color; L, L2 - length [m]**

XX – cable connection	
JC	cable crossed
JS	cable straight
PT	pigtail

XX - type of fiber, cable		XXX - type of fiber	
RF	ribbon fiber	OM1	MM 62.5/125 μm
RC	ribbon cable	OM2-OM4	MM 50/125 μm
TB	tight buffered cable <sup>5</sup>	S2D	SM 9/125 μm (G.652D)
		S5X <sup>4</sup>	SM 9/125 μm (G.655X)
		S7X <sup>4</sup>	SM 9/125 μm (G.657X)

Note: 2) define jacket color, if requested  
3) L2 – fanout length if defined  
4) X – according fiber subtypes (e.g. G.657A1)  
5) type: TB-12-S7A1-LSZH/OFNP-YE

**Fan-out fiber color (13-24: black strip)**

1/13	2/14	3/15	4/16	5/17	6/18	7/19	8/20	9/21	10/22	11/23	12/24
Blue	Orange	Green	Brown	Gray	White	Red	Black/ Transparent	Yellow	Violet	Rose	Aqua

**Cable jacket color code:** YE - yellow: SM  
OG - orange: OM1, OM2  
AQ - aqua: OM3, OM4

**Fibers interconnection:**

	A connector	B connector	A	B cross cable	B straight cable
Cross cable			1	12	1
Straight cable			2	11	2
			3	10	3
			4	9	4
			5	8	5
			6	7	6
			7	6	7
			8	5	8
			9	4	9
			10	3	10
			11	2	11
Fan-out cord			12	1	12
			13	24	13
			14	23	14
			15	22	15
			16	21	16
			17	20	17
			18	19	18
			19	18	19
			20	17	20
			21	16	21
			22	15	22
			23	14	23
			24	13	24

  

MTP4	MTP8e	MTP8c	MTP12	MTP24

**Sample:**



NMTP12MP/FP-TBS7A1-JC-YE-010



NMTP12FP-12xNLC-TBOM1-OG-0.2-005

