

# TFO's DATACENTER SOLUTION

Growing Data-Center Consolidation, higher-performance servers, and increasing application density on virtualized servers is driving network for MTP Plug-n-Play System often require unique, custom products. Our pre-terminated components can be customized with user-friendly configurators that take you step-by-step through the specification process. With 100% factory testing and no need for field terminations or splices, installation time is reduced by up to 75%. Pre-terminated MTP® cassettes and this standard will continue to add value as we transition into higher 40G and 100G data rates

## Trunk Cables

- MTP to MTP, including new 24-fiber MTP connector
- Discrete to discrete (ST, SC, LC, FC, MU)
- MTP to discrete
- Single-mode, multimode, and laser-optimized
- Available up to 24F to 144F & 12F/24F □ ber-SM.OM3.OM4

## Harnesses

- MTP to MTP connectors
- MTP to discrete connectors (ST, SC, LC, FC, MU)
- Single-mode, multimode, and laser optimized
- Keyed LC harnesses lock into any industry compliant adapter
- Available TIA/568 Type A.B & 8F/12F/20F/24F

## MTP® Cassettes

- MTP to MTP
- MTP to discrete (ST, SC, LC, FC, MU)
- Single-mode, multimode, and laser-optimized
- Available 8F/12F/24F



## MTP Patch Cord



MTP Patch Cord terminates the end of an optic fiber: plug and play system to connect equipment and termination box. Available up to 12F/24F and SM, OM3, OM4.

## LC Patch Cord



LC Patch Cord terminates the end of an optic fiber: installations to connect equipment and termination box. Available SC, LC, FC, ST and SM,OM3,OM4.

## MTP Harness



MTP Harness connects to electronics with LC style ports and for use in aggregation of 10G ports to 40G,100Gport. Available TIA-568 Type A, B and 8F/12F/20F/24F.

## MTP Trunks



MTP Trunks consist of sub-unitized Micro distribution fiber optic cable in fiber counts ranging from 24 to 144. Available up to 12F/24F and SM,OM3,OM4.

## MTP Array Harness



MTP Array Harness designed to cross connect from structured cabling directly into active transceivers with MTP interface. Pre-terminated and can be used with brackets in place of MTP cassettes.

## MTP Cassette



MTP Cassette provided the interface between the MTP connector on the trunk and the LC or SC path cords that will then connect directly to the electronics. Cassettes can be installed quickly into the plug & play patch panel. Available 8,12,24F.

## MTP Plate & Mount Bracket



MTP Plate provided a simple interface to connect MTP trunk harness to MTP trunk standard in Patch panel. can be facilitate the use of 40G,100G electronics. Available up to 3,6 MTP adaptors MTP Mount Bracket provide a simple interface to connect MTP to MTP on Rack side. Available 4,8,12 adaptors.

## MTP Patch Panel



Patch panel designed for use as a rack mount interconnect point where termination and accommodate connectivity and accommodate MTP plates and cassettes. Available 1~4U.

## Cleaning Accessories



Cleaning accessories designed to clean single fiber connectors residing in an adaptor, faceplate or bulkhead.

## Keystone Jack



Keystone jack standardized snap-in package for mounting a variety of low-voltage electrical jackets or into a keystone wall plate, face plate, surface mount box, or patch panel. Available Cat5e, Cat6, Cat6A.

## 110 Wiring Block & Patch Panel



110 Wiring Block is a type of punch block used to terminate runs of on-premises wiring in a structured cabling system. Patch panel usually within a telecommunications closet, that connects incoming and outgoing lines of a LAN or other communication, electronic or electrical system. Available Cat5e, Cat6, Cat6.

## Patch Cord



Patch cord used to connect on electronic to another for signal routing and typically refer only to short cords used with patch panels. Available Cat5e, Cat6, Cat6A.

# DAC(Direct Attach Copper)

## SFP+ Cable Assemblies, 0.5m/1m/2m/3m/4m/5m/6m/7m/10m Reach RoHS6 Compliant

TFO Copper SFP+ Cable assemblies are high-performance, cost effective I/O solutions for 10 GB Ethernet and 10G Fiber Channel applications. SFP+ copper modules allow hardware manufacturers to achieve high port density, configurability and utilization at a very low cost and to reduce power budget. The high-speed cable assemblies meet and exceed the performance and reliability requirements stipulated by Gigabit Ethernet and Fiber Channel industry standard.

### Features

- Supports 1Gb/s to 10.5Gb/s bit rates
- Support 1x, 2x, 4x and 8x Fiber Channel data rates
- Hot-pluggable SFP 20PIN footprint
- AC coupling of PECL signals
- Improved Pluggable Form Factor (IPF) compliant for enhanced EMI/EMC performance
- Lower Power Consumption < 0.5W
- Power Supply: +3.3V
- Compatible to SFP+ MSA
- Temperature Range: -5~ 75°C
- RoHS6 Compliant

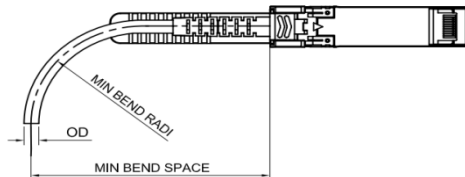
### Applications

- Storage Area Networks (SAN), Network Attached Storage and Storage Servers
- 1G/2G/4G/8G Fiber Channel
- Switched fabric I/O
- Data center cabling infrastructure
- Hubs, switches, routers, servers, NICs

### Normal Operating Condition

Parameter	Min	Typ	Max	Units
Operating Case Temperature	-5	-	75	°C
Supply Voltage	3.14	3.3	3.47	V
Power Consumption	-	-	0.5	W
Data Rate	1	-	10.5	Gbps

### Physical Data



Parameter	Description	30AWG	24AWG	Units
Cable Diameter	OD	4.4	6.3	mm
Bend Radius	Minimum Sustained Bend	21	30	mm

# AOC(Active Optical Cable)

## Multi-Mode 10G BASE-SR, SFP+ 10Gbps Active Optical Cable RoHS6 Compliant

TFO SFP+ Active Optical Cable (AOC) is a 10Gbps solution to 10G Ethernet, and high-performance computing applications. The integrated cable transmits 10Gbps data in each direction over a loose tube fiber with distance up to 100m. The AOC is SFP+ MSA compliance, low power consumption and lightweight.

### Features

- Operating Case Temperature: -5°C~+75°C
- 10Gb/s serial optical interface
- 850nm high-speed VCSEL and PIN receiver
- Support 10Gb/s transmission distance up to 100 meters with OM2 MM fiber
- Single 3.3V power supply
- Mechanical specifications compliant with SFF-8432
- Electrical specifications compliant with SFF-8431
- Support digital diagnostics monitoring for module temperature, Vcc, Rx input power, Tx\_Disable and Rx\_LOS
- Typical power consumption 200mW
- I2C communication bus
- Hot pluggable
- RoHS-6 compliance

### Applications

- 10G Ethernet
- Datacom and Telecom switch or router backplane connection
- High performance computing interconnect

### Optical Characteristics

Parameter	Min	Typ	Max	Unit
<b>Transmitter</b>				
Optical Modulation Amplitude (OMA)		-1.5		dBm
Average Launch Power	-5		-1	dBm
Optical Wavelength	840	850	860	nm
RMS Spectral Width			0.45	dB
Optical Extinction Ratio	3.0	5.5		dB
Transmitter and Dispersion Penalty			3.9	dB
Relative Intensity Noise			-128	dB/Hz
<b>Receiver</b>				
Receiver Sensitivity (OMA) @ 10.3Gb/s			-11.1	dBm
Stressed Receiver Sensitivity (OMA) @ 10.3Gb/s			-7.5	dBm
Maximum Input Power	+0.5			dBm
Wavelength Range	840		860	nm
Receiver Reflectance			-12	dB
LOS De-Assert			-14	dBm
LOS Assert	-30	-23		dBm
LOS Hysteresis	0.5			dB