



# MTP/MPO

**PRODUCT CATALOGUE** 

#### MPO/MTP® Trunk Cables

## **Applications**

- · Data center network
- Optical system access network
- Storage area networking fiber channel
- · High density architectures

#### **Features**

- 100% pre-terminated and tested in factory to ensure transfer performance
- Rapid configuration and networking, reduce installation time
- Supports 40G and 100G network applications
- Jacket material: LSZH, OFNR, OFNP available
- Supports up to 12F, 24F, 48F, 72F, 96F, 144F, customized products are available

# Optical Performance

Performance Level		Standard		Elite		
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
SM MPO/MTP MM		12F/APC	≤0.70	≥60	≤0.35	≥60
	SM	24F/APC	≤0.75	≥60	≤0.35	≥60
	3	48F/APC	≤0.75	≥60		
	ММ	12F/PC	≤0.50	≥20	≤0.35	≥20
		24F/PC	≤0.50	≥20	≤0.35	≥20
		48F/PC	≤0.50	≥20		

#### Note:

# Mechanical Properties

Item		Criteria	Conformance
△IL After 50 Matings	MPO/MTP	≤0.3dB	GR-1435
△IL After 500 Matings	LC/SC/FC/ST	≤0.2dB	IEC 61300-2-2
Min Bend Radius (Dynamic)		20*OD (Cable Diameter)	
Min Bend Radius (Static )		15*OD (C	able Diameter)

#### **Environment Conditions**

Item	Criteria	Conformance
Operation Temperature	-40~60°C	IFC 617F2 1
Storage Temperature	-45~85°C	IEC 61753-1

# MPO/MTP® Harnesses Cables

# **Applications**

- Data Center network
- Optical system access network
- Storage area networking fiber channel
- High density architectures

#### Features

- 100% pre-terminated and tested in factory to ensure transfer performance
- Rapid configuration and networking, reduce installation time
- Supports 40G and 100G network applications
- Jacket material: LSZH, OFNR, OFNP available
- Supports up to 12F, 24F, 48F, 72F, 96F, 144F, customized products are available

## Optical Performance

Performance Level		Standard		Elite		
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
		12F/APC	≤0.70	≥60	≤0.35	≥60
MPO/MTP MM	SM	24F/APC	≤0.75	≥60	≤0.35	≥60
		48F/APC	≤0.75	≥60		
	ММ	12F/PC	≤0.50	≥20	≤0.35	≥20
		24F/PC	≤0.50	≥20	≤0.35	≥20
		48F/PC	≤0.50	≥20		
LC/SC/FC/ST SM	CM	APC	≤0.30	≥60	≤0.10	≥60
	ZIVI	UPC	≤0.20	≥50	≤0.10	≥50
	MM	PC	≤0.20	≥30	≤0.10	≥30

#### Note:

## Mechanical Properties

Item		Criteria	Conformance
△IL After 50 Matings	MPO/MTP	≤0.3dB	GR-1435
△IL After 500 Matings	LC/SC/FC/ST	≤0.2dB	IEC 61300-2-2
Min Bend Radius (Dynamic)		20*OD (Cable Diameter)	
Min Bend Radius (Static )		15*OD (Cable Diameter)	

	Item	Criteria	Conformance	
	Operation Temperature	-40~60°C	IEC 617E2 1	
3	Storage Temperature	-45~85°C	IEC 61753-1	



<sup>1.</sup>Test wavelength:SM@1310/1550nm,MM@850/1300nm;

<sup>2.</sup>Standard conformance: GR-326,GR-1435.

<sup>1.</sup>Test wavelength:SM@1310/1550nm,MM@850/1300nm;

<sup>2.</sup>Standard conformance: GR-326,GR-1435.

## MPO/MTP® Fan out 0.9mm Patch Cords

## **Applications**

- Data center network
- Optical system access network
- Storage area networking fiber channel
- High density architectures

#### **Features**

- · Economical solution for mass-termination of fiber
- Designed for low loss and standard loss SM and MM applications
- Ruggedized round cable, oval cable and bare ribbon options available
- Color coded housings available to differentiate fiber type, polish type and/or connector grade
- Good in repeatability and exchangeability



Performance Level		Standard		Elite		
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
		12F/APC	≤0.70	≥60	≤0.35	≥60
MPO/MTP MM	SM	24F/APC	≤0.75	≥60	≤0.35	≥60
		48F/APC	≤0.75	≥60		
		12F/PC	≤0.50	≥20	≤0.35	≥20
	MM	24F/PC	≤0.50	≥20	≤0.35	≥20
		48F/PC	≤0.50	≥20		
LC/SC/FC/ST SM	CM	APC	≤0.30	≥60	≤0.10	≥60
	SIVI	UPC	≤0.20	≥50	≤0.10	≥50
	MM	PC	≤0.20	≥30	≤0.10	≥30

#### Note

## Mechanical Properties

Item		Criteria	Conformance
△IL After 50 Matings	MPO/MTP	≤0.3dB	GR-1435
△IL After 500 Matings	LC/SC/FC/ST	≤0.2dB	IEC 61300-2-2
Min Bend Radius (Dynamic)		20*OD (C	able Diameter)
Min Bend Radius (Static )		15*OD (Cable Diameter)	

#### **Environment Conditions**

Item	Criteria	Conformance	
Operation Temperature	-40~60°C	150 01750 1	
Storage Temperature	-45~85°C	IEC 61753-1	

# IP-Series MPO/MTP® Assemblies

# **Applications**

- Data Center network
- Optical system access network
- Storage area networking fiber channel
- High density architectures

#### Features

- Available for standard or low loss MPO/MTP® interface
- Bayonet locking design with IP68 sealing
- Highly customizable configurations
- Designed with protective housing, which fulfills IP67 environmental sealing



## Optical Performance

Performance Level		Standard		Elite		
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
		12F/APC	≤0.70	≥60	≤0.35	≥60
MPO/MTP MM	SM	24F/APC	≤0.75	≥60	≤0.35	≥60
		48F/APC	≤0.75	≥60		
		12F/PC	≤0.50	≥20	≤0.35	≥20
	MM	24F/PC	≤0.50	≥20	≤0.35	≥20
		48F/PC	≤0.50	≥20		
LC/SC SM	CM	APC	≤0.30	≥60	≤0.10	≥60
	UPC	≤0.20	≥50	≤0.10	≥50	
	MM	PC	≤0.20	≥30	≤0.10	≥30

#### Note

# Mechanical Properties

Item		Criteria	Conformance
△IL After 50 Matings	MPO/MTP	≤0.3dB	GR-1435
△IL After 500 Matings	LC/SC/FC/ST	≤0.2dB	IEC 61300-2-2
Min Bend Radius (Dynamic)		20*OD (Cable Diameter)	
Min Bend Radius (Static )		15*OD (Cable Diameter)	

Item	Criteria	Conformance	
Operation Temperature	-40~60°C	IEC 61752 1	
Storage Temperature	-45~85°C	- IEC 61753-1	

<sup>1.</sup>Test wavelength:SM@1310/1550nm,MM@850/1300nm;

<sup>2.</sup>Standard conformance: GR-326,GR-1435.

<sup>1.</sup>Test wavelength:SM@1310/1550nm,MM@850/1300nm;

<sup>2.</sup>Standard conformance: GR-326,GR-1435.

# **High Density Patch Cords**

#### **Applications**

• Connection between optical distribution panels and equipment

#### Features

- 100% pre-terminated and tested in factory to ensure transfer performance
- Reduction of installation time
- Fire retardant in conformity with IEC 60332-3C standard
- No corrosive gas emissions IEC 60754-2 standard
- Low smoke zero halogen emissions with IEC 61034-2 standard
- Using standard LC, SC, ST, FC connectors, supporting simplex or duplex
- Customized products available





## Optical Performance

Performance Level		Standard		Elite		
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
MPO/MTP SM	CM	12F/APC	≤0.70	≥60	≤0.35	≥60
	21/1	24F/APC	≤0.75	≥60	≤0.35	≥60
	MM	12F/PC	≤0.50	≥20	≤0.35	≥20
		24F/PC	≤0.50	≥20	≤0.35	≥20
LC/SC/FC/ST		APC	≤0.30	≥60	≤0.10	≥60
	SM	UPC	≤0.20	≥50	≤0.10	≥50
	MM	PC	≤0.20	≥30	≤0.10	≥30

#### Note:

## Mechanical Properties

Item		Criteria	Conformance
△IL After 50 Matings	MPO/MTP	≤0.3dB	GR-1435
△IL After 500 Matings	LC/SC/FC/ST	≤0.2dB	IEC 61300-2-2
Min Bend Radius (Dynamic)		20*OD (C	able Diameter)
Min Bend Radius (Static )		15*OD (C	able Diameter)

## **Environment Conditions**

Item	Criteria	Conformance	
Operation Temperature	-40~60°C	JEC 61752 1	
Storage Temperature	-45~85°C	EC 61753-1	

# MPO/MTP® Loopback

#### **Applications**

- 40GbE QSFP+ Optical Testing
- · Research and Development
- Manufacturing Test
- Troubleshooting
- Quality Control
- Training

#### Features

- Available in a wide variety of wiring configurations and fiber types
- All loopbacks meet TIA/EIA and IEC intermateability standards
- 8, 12, and 24 Fiber available
- Easy Installation/Removal, available with or without Pull tabs
- Compact and portable with lanyard feature

# Optical Performance

Per	rformance Le	vel	Sta	ndard	E	lite
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
MPO/MTP MM	CM	12F/APC	≤0.70	≥60	≤0.35	≥60
	SIVI	24F/APC	≤0.75	≥60	≤0.35	≥60
	N 4 N 4	12F/PC	≤0.50	≥20	≤0.35	≥20
	IVIIVI	24F/PC	≤0.50	≥20	≤0.35	≥20

#### Note:

- 1.Test wavelength:SM@1310/1550nm,MM@850/1300nm;
- 2.Standard conformance: GR-326, GR-1435.

## Mechanical Properties

Min Bend Radius (Static )		15*OD (C	able Diameter)
Min Bend Radius (Dynamic)		20*OD (C	able Diameter)
△IL After 500 Matings	LC/SC/FC/ST	≤0.2dB	IEC 61300-2-2
△IL After 50 Matings	MPO/MTP	≤0.3dB	GR-1435
Item		Criteria	Conformance

Item	Criteria	Conformance
Operation Temperature	-40~60°C	IEC 617E2 4
Storage Temperature	-45~85°C	EC 61753-1



<sup>1.</sup>Test wavelength:SM@1310/1550nm,MM@850/1300nm;

<sup>2.</sup>Standard conformance: GR-326,GR-1435.

#### MT Patch Cords

# **Applications**

- QSFP ( quad small form-factor pluggable)
- SFP+active optical cables
- Parallel light optical transceiver module
- Super computers
- Communication
- Military applications
- Data centers



- Transmission rate: 40Gbps/100Gbps/168Gbps
- GR-1435 compliant
- Simple structure easy to locate
- Low cost
- · Customized products available



Performance Level		e Level Standard		Elite		
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
N/T	SM	12F/APC	≤0.50	≥60	≤0.35	≥60
MT	MM	12F/PC	≤0.50	≥20	≤0.35	≥20

#### **Environment Conditions**

Item	Criteria	Conformance
Operation Temperature	-40~60°C	150 01752 1
Storage Temperature	-45~85°C	IEC 61753-1

Note: Customization available

#### **Pre-Terminated Cables**

## **Applications**

- Connected with trunk cables on one end, equipment port on the other end
- Connected with transfer modules on one end, equipment port on the other end

#### **Features**

- 100% pre-terminated and tested in factory to ensure transfer performance
- Rapid configuration and networking, reduce installation time
- Supports 40G and 100G network applications
- Jacket material: LSZH, OFNR, OFNP available
- Supports up to 12F, 24F, 48F, 72F, 96F, 144F, customized products are available

# Optical Performance

Performance Level		Performance Level Standard		EI	ite	
Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
LC/SC/FC/ST SM	21.1	APC	≤0.30	≥60	≤0.20	≥65
	SM	UPC	≤0.20	≥50	≤0.10	≥50
	MM	PC	≤0.20	≥30	≤0.10	≥30

#### Note

1.Test wavelength:SM@1310/1550nm,MM@850/1300nm;

2.Standard conformance: GR-326,GR-1435.

# Mechanical Properties

Item		Criteria	Conformance
△IL After 50 Matings	MPO/MTP	≤0.3dB	GR-1435
△IL After 500 Matings	LC/SC/FC/ST	≤0.2dB	IEC 61300-2-2
Min Bend Radius (Dynamic)		20*OD (C	able Diameter)
Min Bend Radius (Static )		10*OD (C	able Diameter)

Item	Criteria	Conformance
Operation Temperature	-40~60°C	IEC 617E2 4
Storage Temperature	-45~85°C	- IEC 61753-1

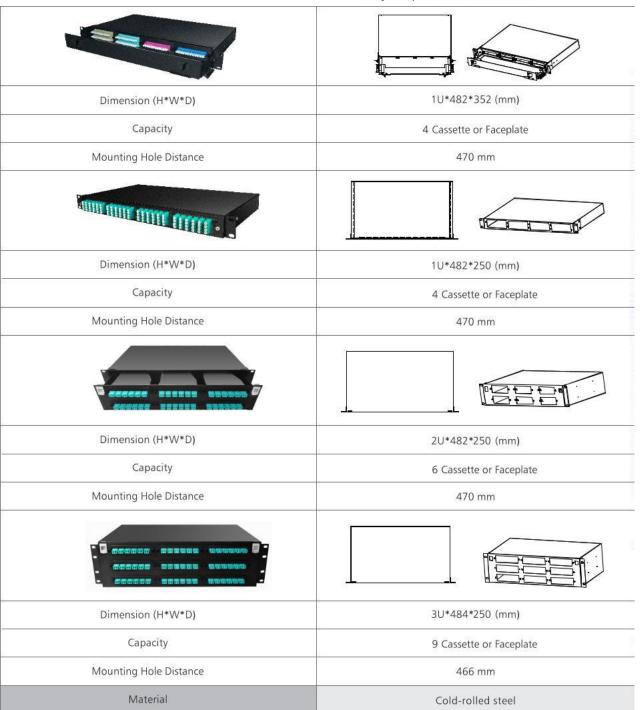
## MTP/MPO® Patch Panel

## **Applications**

- Data centers, pre-terminated installations
- Telecommunication networks
- Storage area networking fiber channel
- High denisty architectures

#### **Features**

- Finishing: powder coated
- Fits into 19 inch installations
- Max capacity up to 144 fiber for 1U
- Sliding tray design
- Easy to operate and maintain



## MPO/MTP® Cassettes

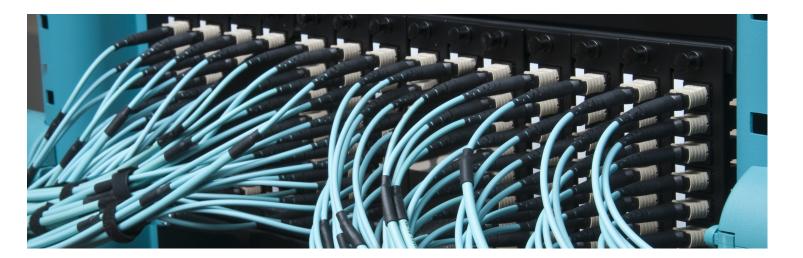
# **Applications**

 Implementation of the structured cabling in Data Centers

#### Features

- 100% pre-terminated and tested in factory to ensure transfer performance
- Rapid configuration and networking, reduce installation time
- Supports 40G and 100G network applications

•	
Dimension (H*W*D)	36.5 x 102 x 116 (mm)
Capacity	1MPO/MTP*-12F LC
Mounting Hole Distance	91 mm
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Dimension (H*W*D)	34.5 x 109 x 114 (mm)
Capacity	1MPO/MTP®-12F LC 1MPO/MTP®-24F LC 2MPO/MTP®-24F LC
Mounting Hole Distance	99 mm
Dimension (H*W*D)	27 x 130 x 126(mm)
Capacity	1MPO/MTP*-12F LC
Mounting Hole Distance	118 mm
Dimension (H*W*D)	35 x 155 x 95 (mm)
Capacity	1MPO/MTP®-12F LC 1MPO/MTP®-24F LC 2MPO/MTP®-24F LC
Mounting Hole Distance	145 mm
Material	Cold-rolled steel Plastic



## **GOOD QUALITY**

We strongly believe that product quality and performance are the key success factors of a company. This mindset has been rooted throughout the whole organization, everybody believes that only high standards are necessary to win the customer and market.

#### **INNOVATIVE TECHNOLOGY**

We always learn new technology by investing in production facilities, engineering process control systems, and talent development to maintain our status as a leading fiber optic connection soultions.

#### HIGH STANDARD

We believe a high standard of professionalism towards our product and service offerings combined with our superior engineering solutions serve to satisfy the unique needs of our customers.

