

Data Center Series

ALMAFIBER GROUP OF COMPANIES:
ATK FIBRA ÓPTICA S. L.
SHENZEN ALMA FIBER LIMITED.
HONG KONG ALNMAFIBER LTD.

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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	L(max) (dB)	RL(min) (dB)	IL(max)(dB)	RL(min) (dB)
MPO/MTP	SM	12F/APC	≤ 0.70	≥60	≤ 0.35	≥ 60
		24F/APC	≤0.75	≥60	≤ 0.35	≥ 60
		48F/APC	≤0.75	≥60		
	MM	12F/PC	≤0.50	≥20	≤ 0.35	≥ 20
		24F/PC	≤0.50	≥.20	≤ 0.35	≥ .20
		48F/PC	≤0.50	≥20		

Note:

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

Mechanical Properties

Item	Criteria	Conformance
<>IL After 50 Matings	MPO/MTP ≤ 0.3dB	GR-1435
<>I After 500 Matings	LC/SC/FC/ST ≤ 0.2dB	IEC 61300-2-2
Min Bend Radius {Dynamic}	20*0D {Cable Diameter}	
Min Bend Radius {Static: }	15**0D {Cable Diameter}	

Environment Conditions

Item	Criteria	Conformance
Operation Temperature	-40-60°C	IEC 61753-1
Storage Temperature	-4s-s5·c	

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	Endfac:e	L(max) (dB)	RL(min){dB	IL(max) (dB)	RL(min) (dB)
MPO/MTP	SM	12F/APC	≤ 0.70	≥ 60	≤0.35	≥ 60
		24F/APC	≤ 0.75	≥ 60	≤0.35	≥ 60
		48F/APC	≤ 0.75	≥ 60		
	MM	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	APC	≤ 0.30	≥ 60	≤ 0.10	≥ 60
		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 c:onformanc:e: GR-32&GR-1435.

Mechanical Properties

Item	Criteria	Conformance
ILAfter 50 Matings	MPO/MTP ≥ 0.3dB	GR-1435
ILAfter 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•QD {Cable Diameter}	

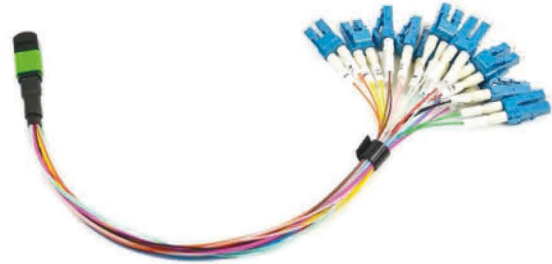
Environment Conditions

Item	Criteria	Conformance
Operation Temperature	-40° C - 60°C	IEC61753-1
Storage Temperature	-40° C - 85°C	

MPO/MTP® Fanout 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

Optical Performance

Performance Level!			Standard		Elite	
Connector	Mode	End face	IL(max) (dB)	RL(min)(dB)	L(max) (dB)	RL(min) (dB)
MPO/MTP	SM	12F/APC	≤ 0.70	≥60	≤0.35	≥ 60
		24F/APC	≤ 0.75	≥60	≤0.35	≥ 60
		48F/APC	≤ 0.70	≥ 60		
	MM	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	APC	≤ 0.35	≥60	≤0.10	≥60
		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	IEC61300-2-2
Min Bend Radius (Dynamic)	20*OD (Cable Diameter)	
Min Bend Radius (Static)	15*OD (Cable Diameter)	

Environment Conditions

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

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
- Requirements

Optica 1 Performance

Performance Level!			Standard		Ete	
Connector	Mode	End face	IL(max) (dB)	RL(min) (dB)	IL(max) (dB)	RL(min) (dB)
MPO/MTP	SM	12F/APC	≤0.70	≥60	≤0.35	≥60
		24F/APC	≤0.75	≥60	≤0.35	≥60
		48F/APC	≤0.75	≥60		
	MM	12F/PC	≤0.50	≥20	≤0.35	≥20
		24F/PC	≤0.50	≥20	≤0.35	≥20
		48F/PC	≤0.50	≥20		
LC/SC	SM	APC	≤0.30	≥60	≤0.10	≥60
		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
"Later 50 Mating MPO/MTP	≤0.3dB	GR-1435
"Latter 500 Mating 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)	

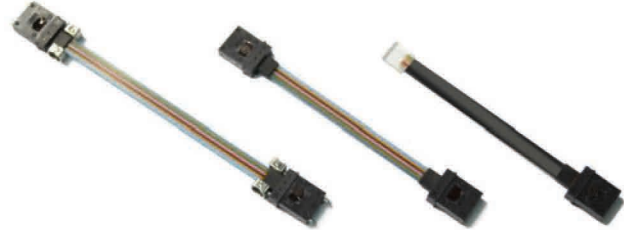
Environment Conditions

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

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



Features

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

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

Environment Conditions

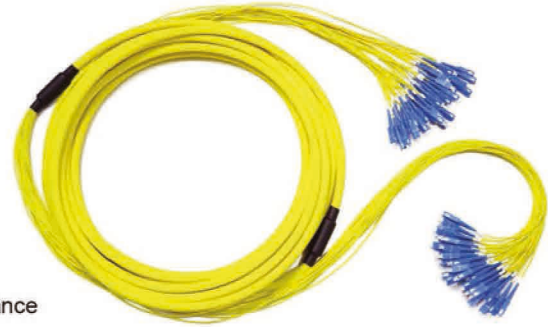
Item	Criteria	Conformance
Operation Temperature	-40°C ~ 60°C	IEC61753-1
Storage Temperature	-45°C ~ 85°C	

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			Standard		Elite	
Connector	Mode	Endface	L(max)(dB)	RL(min) (dB)	L(max) (dB)	RL(min) (dB)
LC/SC/JFC/ST	SM	APC	≤0.30	≥60	≤0.20	≥65
		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
↳.IL After 500 Matings	LC/SC/FC/ST	≤0.2dB
Min Bend Radius (Dynamic)	20*OD (Cable Diameter)	
Min Bend Radius (Static)	10*OD (Cable Diameter)	

Environment Conditions

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

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



Features

- Transmission rate: 40Gbps/100Gbps/168Gbps
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Connector	Mode	Endface	IL(max) (dB)	RL(min) (dB)	L(max) (dB)	RL(min) (dB)
MT	SM	12F/APC	≤0.50	≥60	≤0.35	≥60
	MM	12F/PC	≤0.50	≥20	≤0.35	≥20

Environment Conditions

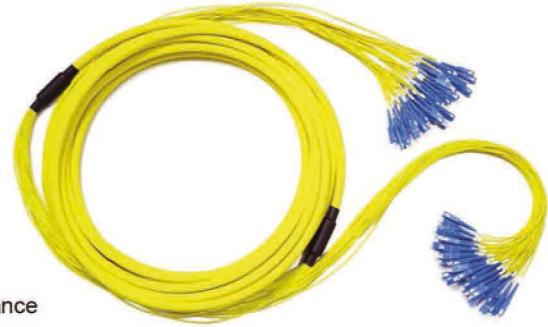
Item	Criteria	Conformance
Operation Temperature	-40°C ~ 60°C	IEC61753-1
Storage Temperature	-45°C ~ 85°C	

Note: Customization available

Pre-Terminated Cables

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



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Connector	Mode	Endface	L(max)(dB)	RL(min) (dB)	L(max) (dB)	RL(min) (dB)
LC/SC/JFC/ST	SM	APC	≤0.30	≥60	≤0.20	≥65
		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
↳.IL After 500 Matings	LC/SC/FC/ST	≤0.2dB
Min Bend Radius (Dynamic)	20*OD (Cable Diameter)	
Min Bend Radius (Static)	10*OD (Cable Diameter)	

Environment Conditions

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


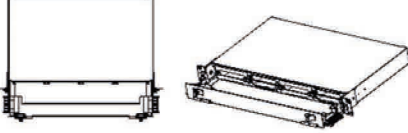
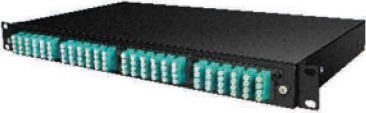
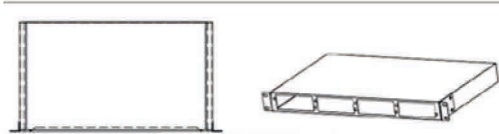

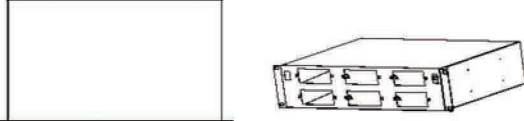

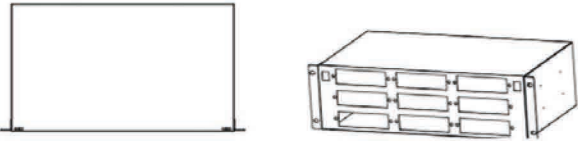
MTP/MPO Patch Panel

Applications

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

	
Dimension (H*W*D)	1U*482*352 (mm)
Capacity	4 Cassette or Faceplate
Mounting Hole Distance	470 mm
	
Dimension (H*W*D)	1U*482*250 (mm)
Capacity	4 Cassette or Faceplate
Mounting Hole Distance	470 mm
	
Dimension (H*W*D)	2U*482*250 (mm)
Capacity	6 Cassette or Faceplate
Mounting Hole Distance	470 mm
	
Dimension (H*W*D)	3U*484*250 (mm)
Capacity	9 Cassette or Faceplate
Mounting Hole Distance	466 mm
Material	Cold-rolled steel







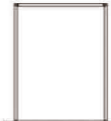
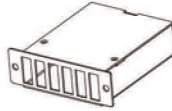







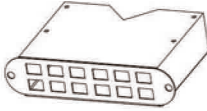
MPO/MTP Cassettes

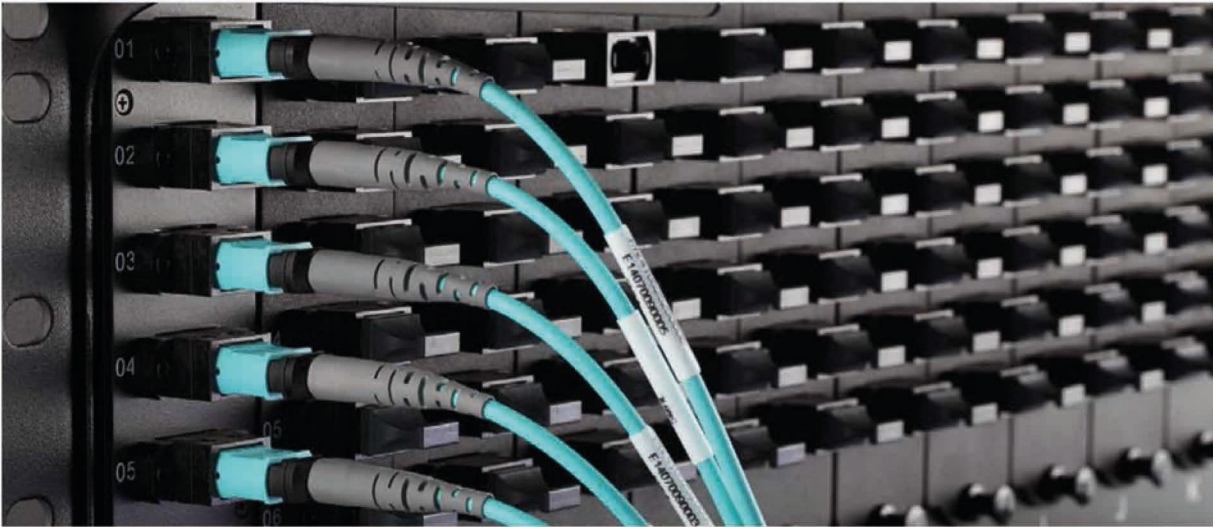
Applications

- 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	1MPO/MTP®-24F LC	2MPO/MTP®-24F LC
Mounting Hole Distance	91 mm		
			
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	1MPO/MTP®-24F LC	2MPO/MTP®-24F 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		
Mounting Hole Distance	145 mm		
Material	Cold-rolled steel		Plastic



Hong Kong Almafiber Technology LTD.

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 solutions.

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.