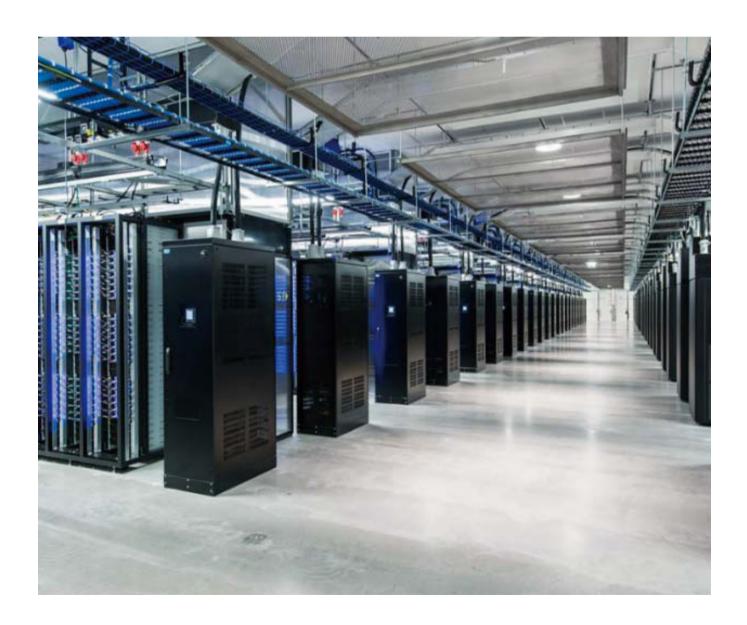


FastLink[™]Modular Fiber Cabling Solution in the Data Center

In data center, fast and efficient cable installation and interconnection is the foundation for reliable data, voice, video and other services. FastLinkTM fiber cabling solution is such a modular network solution based on creative technology development, fast and accurate manufacturing technology. Modular fiber cabling solution, which adapts to the application from compact to large data centers, applies to variety of traditional optical distribution networks and high-density MPO/MTP optical fiber interconnection networks. Therefore, it meets the need by a better price performance and has the advantages of rapid deployment, flexible networking and high performance. FastLinkTM is perfect cabling solution for today's data centers.

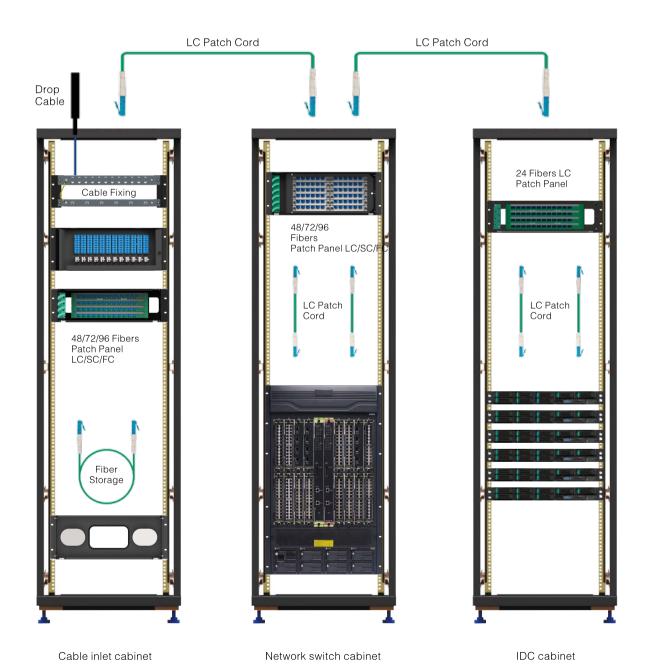


- 1



FastLink[™]Solution–Compact Data Center

Compact data center fiber management solution adopts the LC inlet and traditional optic fiber patch panel directly connecting network switch cabinet and IDC cabinet. This solution is applicable to compact data centers with a small quantity of optical fibers, which can effectively save transition cable and save network cost, increase more convenience to application.

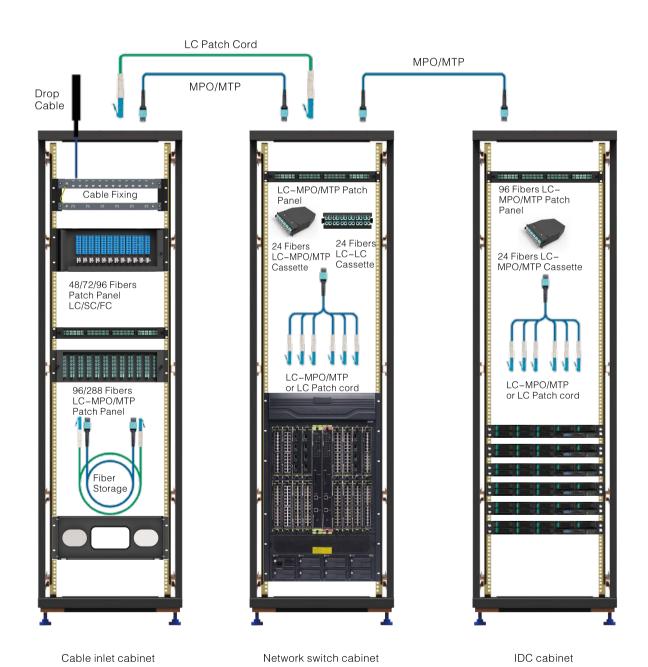


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FastLink[™]Solution–Medium and Compact Data Center

The medium and compact data center fiber management solution adopts MPO/MTP to connect cabinets. It's convenient to operate by LC-MPO/MTP connection in network switch cabinet and IDC cabinet. This solution saves cables, is convenient for installation and maintenance, compatible with various equipments.

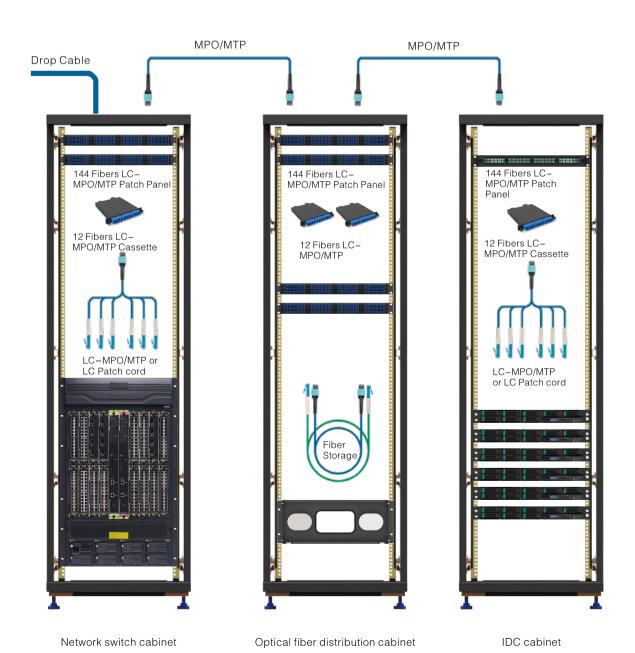


- 3 -

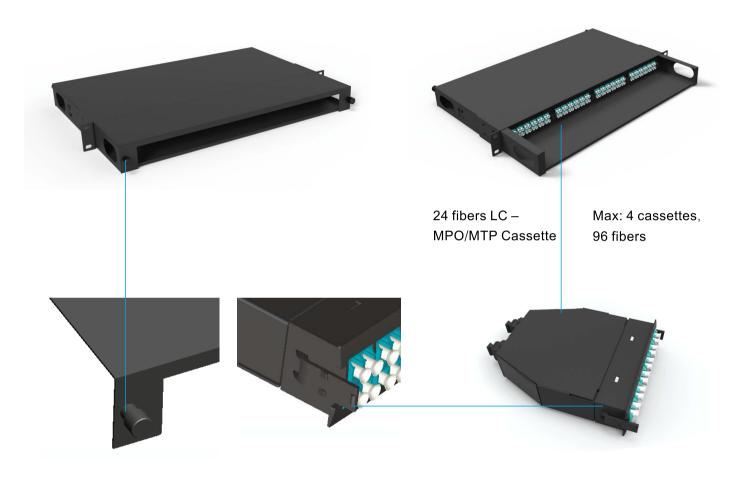


FastLink[™]Solution–Medium and Large Data Center

The medium and large data center fiber management solution adopts MPO/MTP to connect cabinets and adds optical fiber distribution to manage the optical fiber between network switch cabinet and IDC cabinet. Various MPO/MTP and LC patch panel can be installed in optical fiber distribution cabinet to simplify optical fiber management, which is optimized solution for medium and large data center.







The LC-MPO/MTP patch panel is a 19" standard structure with 1U, adopts 4 pieces 24 fibers LC-MPO/MTP cassettes to realize 96 fibers cabling capacity.

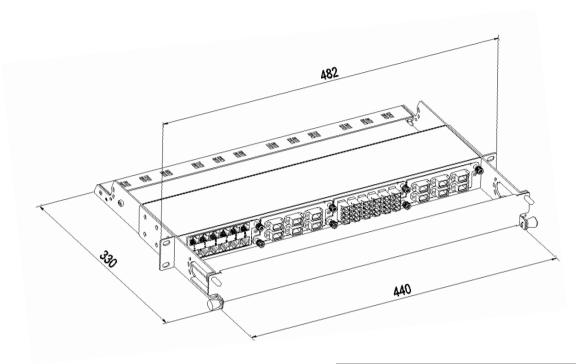
Feature:

- *19 "Standard structure
- *24 fibers standard LC-MPO/MTP cassette
- *Compatible LC / MPO / MTP adapters
- *Perfect optical fiber modular management
- *Easy to install

24 fibers LC-MPO/MTP cassette is our standard product, can be taken out and maintained separately, easy to operate. It is the best solution for medium and large data center optical fiber management.

- *Large capacity optical fiber cabling management
- *Inlet and management of optical cables in medium and large data center
- *Railways, banks, enterprises, etc.





Height	Adapter type	Capacity(fibers)
1U	LC/MPO/MTP	96

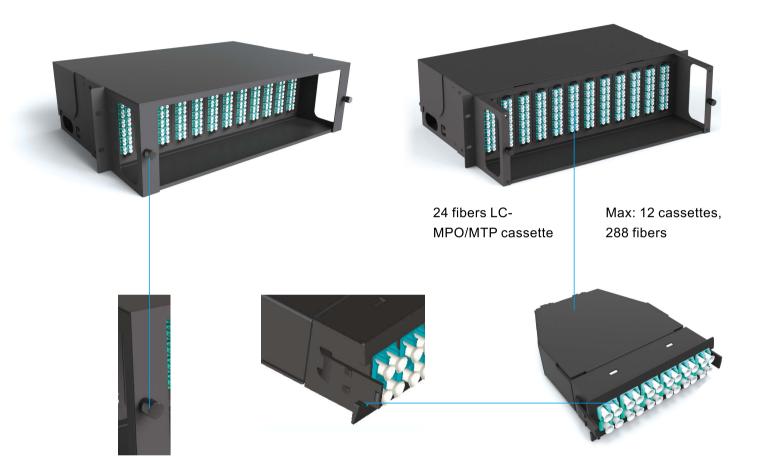
Technical parameter

Technical parameter	Specification
Operating temperature	-20 C~70 C
Material	Metal (high quality aluminum plate), plastic (ABS)
Color	Black (or as required)
Capacity	96 fibers

- 6 -



288 Fibers LC-MPO/MTP Patch Panel



The LC-MPO/MTP patch panel is a 19 "standard structure with 3U, adopts 12 pieces 24 fibers LC-MPO/MTP cassettes to realize 288 fibers cabling capacity.

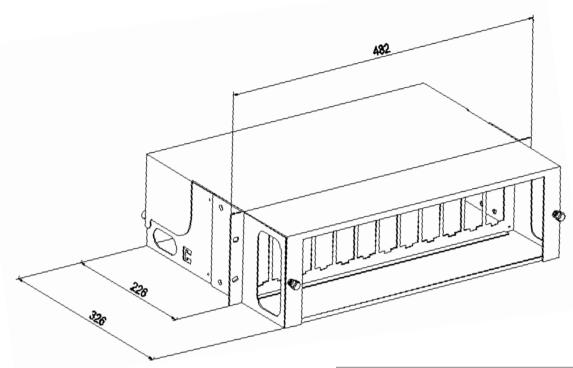
Feature:

- *19 "Standard structure
- *24 fibers standard LC-MPO/MTP cassette
- *Compatible LC / MPO / MTP adapters
- *Perfect optical fiber modular management
- *Easy to install

24 fibers LC-MPO/MTP cassette is our standard product, can be taken out and maintained separately, easy to operate. It is the best solution for medium and large data center optical fiber management.

- *Large capacity optical fiber cabling management
- *Inlet and management of optical cables in medium and large data center
- *Railways, banks, enterprises, etc.





Height	Adapter type	Capacity(fibers)
3U	LC/MPO/MTP	288

Technical parameter

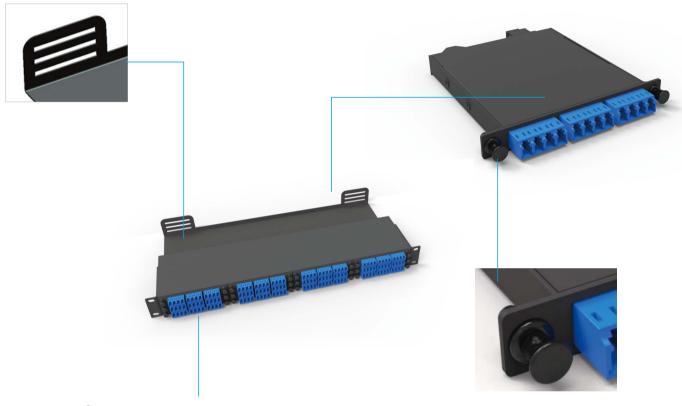
Technical parameter	Specification
Operating temperature	-20℃~70℃
Material	Metal (quality aluminum), plastics (ABS)
Color	Black (or as required)
Capacity	288 fibers



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144 fibers high density of LC-MPO/MTP patch panel



Open structure, Max 12 pieces of 12 fibers LC-MPO/MTP cassettes, 144 fibers

The LC-MPO/MTP patch panel is a 19 "standard structure with 1U, adopts 12 pieces of 12 fibers LC-MPO/MTP cassettes to realize 288 fibers cabling capacity.

Feature:

- *19 "Standard structure
- *12fibers standard LC-MPO/MTP cassette
- *Compatible LC / MPO / MTP adapters
- *Perfect optical fiber modular management
- *Easy to install

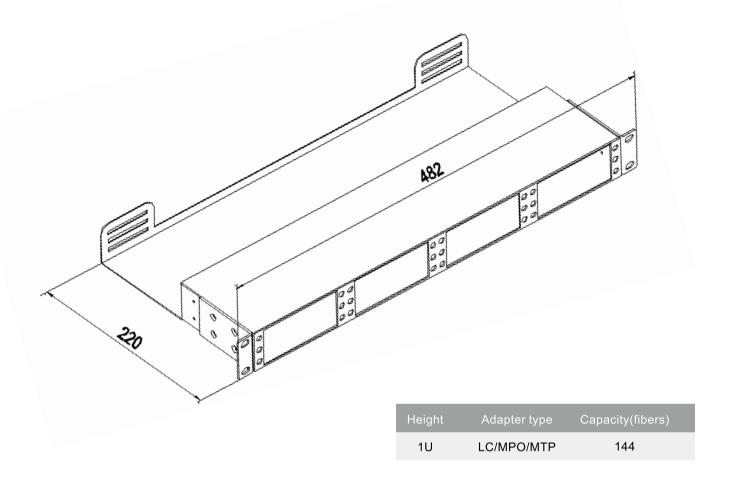
12 fibers LC-MPO/MTP cassette is our standard product, can be taken out and maintained separately, easy to operate. It is the best solution for medium and large data center optic fiber management.

Application:

*Large capacity optical fiber cabling management

*Inlet and management of optical cables in medium and large data centers Railways, banks, enterprises, etc.





Technical parameter

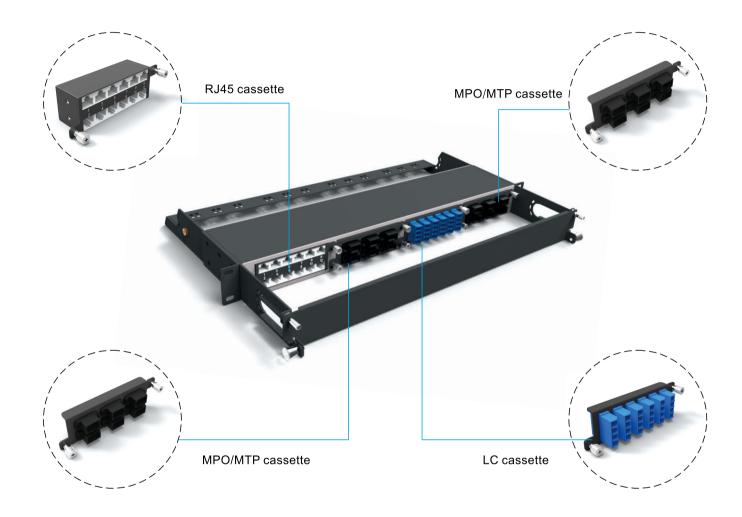
Technical parameter	Specification
Operating temperature	-20℃~70℃
Material	Metal (high quality cold rolled steel plate), plastic (ABS)
Color	Black (or as required)
Capacity	144 fibers

-10-



Fiber and Copper Integrated Patch Panel

Fiber and Cooper Integrated Patch Panel



Fiber and copper integrated patch panel is a 19 "standard structure, to realize the integrated cabling management of various modules, such as RJ45 / MPO/MTP/LC / SC

Feature:

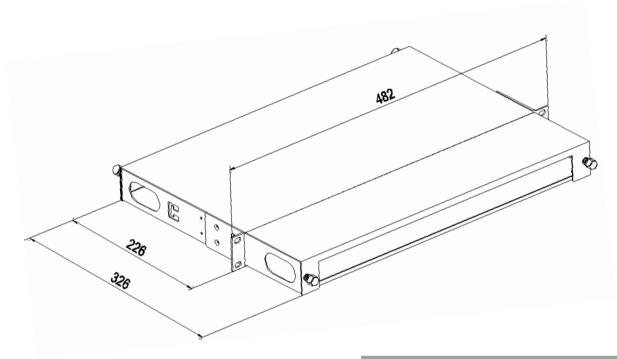
- 19 "standard structure
- *Integrated cabling management for fiber and cooper modules
- *Excellent fiber and copper management
- *Revolving front panel structure for convenient maintenance and marking
- * RJ45 /MPO/ MTP/ LC/SC modules available

Fiber and copper integrated patch panel is convenient cabling and suitable for ODF and data cabinet cabling management, also can be mixed with other equipment, which is the best solution for medium and compact data center cabling management.

- *Small capacity fiber and copper cabling management
- *Fiber and copper cabling management in medium and compact data center.
- *Railways, banks, enterprises, etc.



Fiber and Copper Integrated Patch Panel



Height	Panel type	Capacity (ports)
1U	RJ45	48
1U	MTP	24

Technical parameter

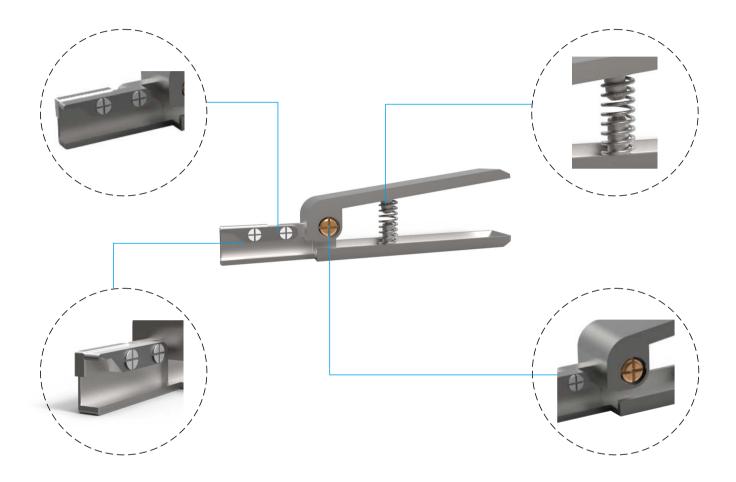
Technical parameter	Specification
Operating temperature	-20℃~70℃
Material	Metal (high quality cold rolled steel plate), plastic (ABS)
Color	Black (or as required)
Capacity	Maximum 48 ports (RJ45) / maximum 24 ports (MTP) / maximum 96 fibers(LC)

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LC Pliers for High Density Patch Panel

LC Pliers for High-Density LC Patch Panel



For deployed high-density LC patch panel, LC connectors are very difficult to operate by hands because of compact space.

Feature:

- * Plug and pull out LC connector in highdensity patch panel.
- *Limiting retainer to protect connector during operation.
- * Thin housing to avoid interfering other connectors

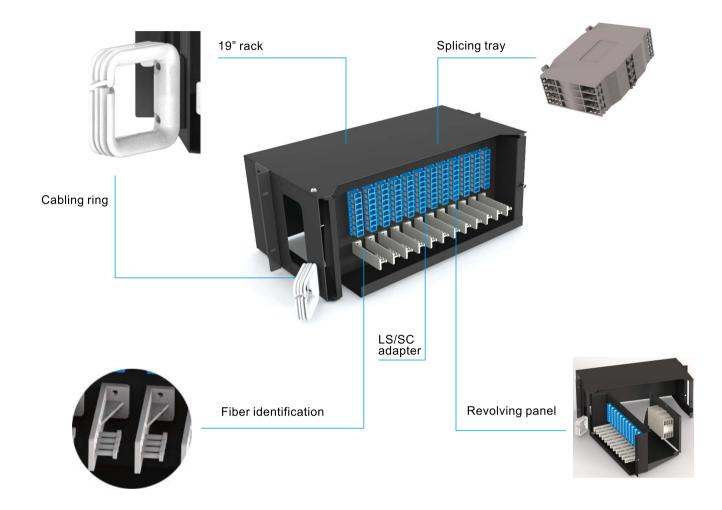
In order to solve the problem, Sindi research and develop LC pliers for high-density LC patch panel and applied for a patent.

- *Large capacity optical fiber management
- * Medium and large data center fiber inlet.
- *Railways, banks, enterprises, etc.



Optical Fiber Patch Panel

Inlet Optical Fiber Patch Panel



Inlet optical fiber patch panel is 19 "standard structure, separated cabling and splicing area, which achieves fiber inlet, coiling, splicing and management, various adaptors available.

Feature:

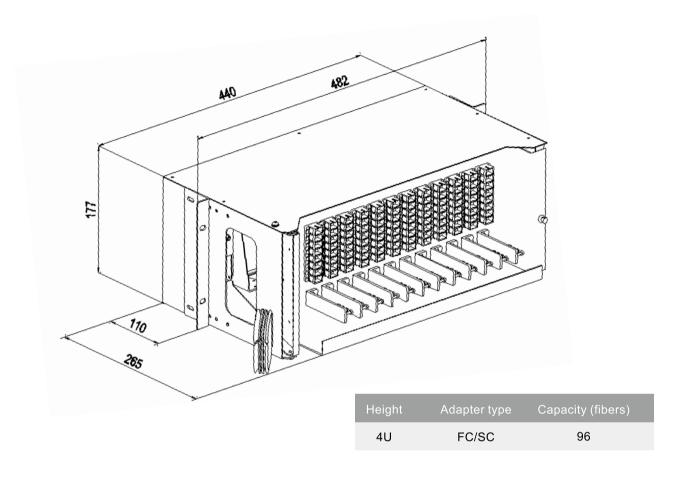
- * 19 "standard structure
- * Cabling and splicing management
- * Perfect optical fiber management design
- *Revolving panel structure for easy maintenance
- * FC / SC / LC available

It can be applied in fiber management ODF cabinet or integrated with other devices, which is best choice in medium and compact data center.

- * Large capacity optical fiber cabling management
- *Medium and compact data center optical fiber inlet management
- *Railways, banks, enterprises, etc.



Optical Fiber Patch Panel



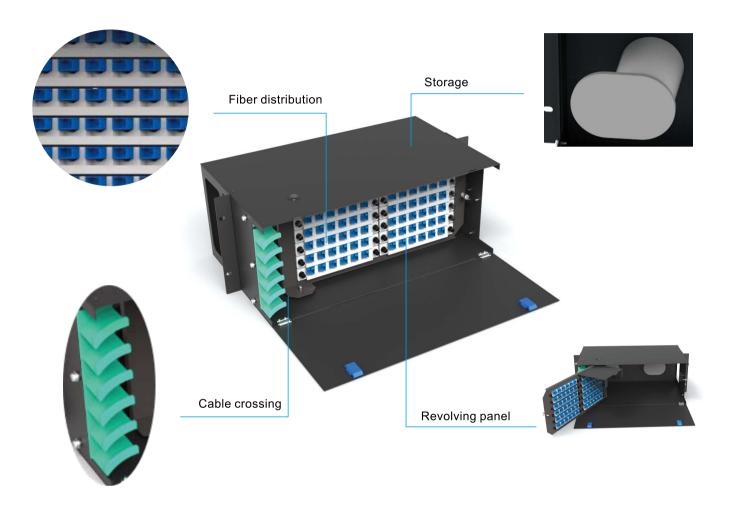
Technical parameter

Technical parameter	Specification
Operating temperature	-20℃~70℃
Material	Metal (high quality cold rolled steel plate), plastic (ABS)
Color	Black (or as required)
Capacity	Maximum 96 fibers (LC), maximum 96 fibers (FC / SC)



Optical Fiber Patch Panel

Optical Fiber Patch Panel for Switch and Server



Optical fiber patch panel for switch and server is 19" standard structure, separated cabling and splicing area, which achieves fiber inlet, coiling, splicing and management, various adaptors available.

Feature:

- * 19 "standard structure
- * Cabling and splicing management
- * Perfect optical fiber management design
- *Revolving panel structure for easy maintenance

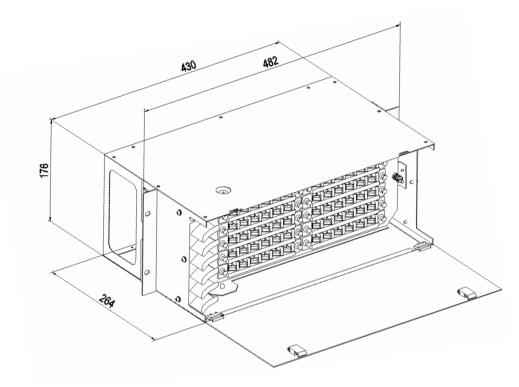
*FC / SC / LC available

It can be applied to fiber management ODF cabinet or integrated with other devices, which is best solution in medium and small data center.

- * Large capacity optical fiber cabling management
- *Medium and compact data center optical fiber inlet management
- *Railways, banks, enterprises, etc.



Traditional Optical Fiber Patch Panel



Height	Adapter type	Capacity (fibers)
4U	FC/SC	72
4U	LC	72/144

Technical parameter

Technical parameter	Specification
Operating temperature	-20℃~70℃
Material	Metal (high quality cold rolled steel plate), plastic (ABS)
Color	Black (or as required)
Capacity	Maximum 144 fibers (LC), maximum 72 fibers (FC / SC)

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Optical Fiber Distribution Cabinet

Optical Fiber Distribution Cabinet





Optical fiber distribution cabinet adopts 19 " standard structure, which achieves fiber inlet, coiling, splicing and management, various MPO/MTP, LC, SC and etc. modules available.

Feature:

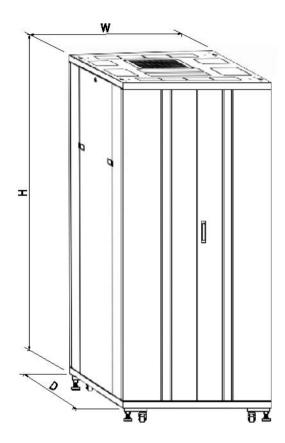
- * 19 "standard structure
- *Modular cabling management
- * Perfect optical fiber management design

It is convenient for cabling management, which is the best solution in medium and compact data center.

- *Large capacity optical fiber cabling management
- *Medium and compact data center optical fiber inlet management
- *Railways, banks, enterprises, etc.



Optical Fiber Distribution Cabinet



H(mm)	W(mm)	D(mm)	
2000(42U)	900	600	

Technical parameter

Technical parameter	Specification
Operating temperature	-20 C ~70 C
Material	Metal (high quality cold rolled steel plate), plastic (ABS)
Color	Black (or as required)



IDC Cabinet





IDC cabinet adopts 19" standard structure, which achieves sever, equipment, optical fiber cabling and storage, PDU, cooling and etc. integrated management.

Feature:

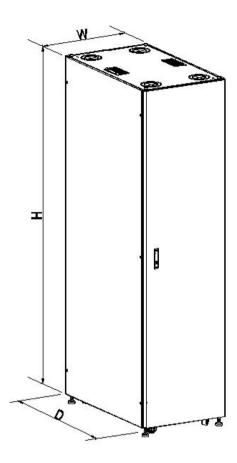
- * 19 "standard structure
- *Modular cabling management
- * Perfect design for PDU and optical fiber management

It is convenient for cabling management, which is best solution for cabling and electric equipment management in data center.

- *Small capacity optical fiber management
- * Cabling management in data center
- *Railways, banks, enterprises, etc.



IDC Cabinet



H(mm)	W(mm)	D(mm)	
2200(47U)	600	800	
2000(42U)	600	800	
2200(47U)	600	1000	
2000(42U)	600	1000	

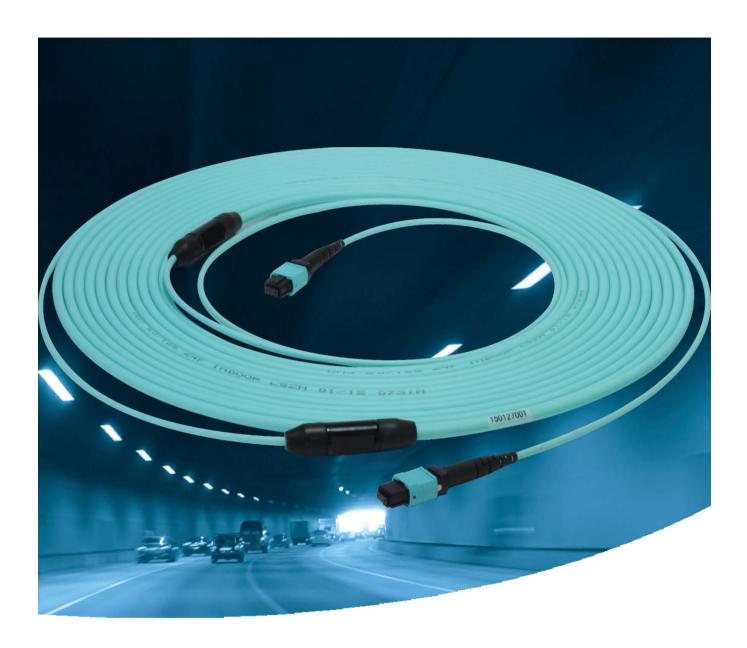
Technical parameter

Technical parameter	Specification
Operating temperature	-20 C ~70 C
Material	Metal (high quality cold rolled steel plate), plastic (ABS)
Color	Black (or as required)

-21-



MPO/MTP Trunk













Application:

- ◆ Wired satellite TV system
- ◆ Telecom operator
- ◆ Optical fiber network
- ♦ FTTH
- ♦ High-Speed transport system
- ◆ Test device
- ◆ Data Center

Feature:

- ◆ Various shaped connectors
- ◆ High-density
- ◆ Low insertion Loss
- ♦ High return loss
- ◆ Cable diameter: 3.0mm,3.6mm,4.5mm and etc. available
- ◆ Singlemode and Multimode

Optical performance:

Parameter	Singlemode	Multimode
Low Insertion Loss	≤0.35dB	≤0.35dB
Standard Insertion Loss	≤0.75dB	≤0.6dB
Return Loss	≥50dB	≥20dB
Operation Temperature	-40℃~+80℃	-40℃~+80℃

Order guide:

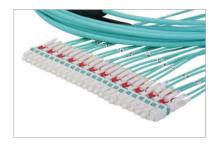
MPO/MTP-Male/APC-MPO/MTP-Female/APC-SMф0.91LSZH

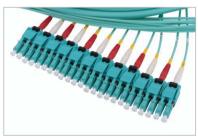
Item	Unit	Specification
1.Connector Type	_	MPO/MTP-Female, MPO/MTP-Male
2 Ferrule End Face		PC, APC
3. Connector Type		MPO/MTP-Female, MPO/MTP-Male
4.Furrel End Face		PC, APC
5.Fiber		SM(OS1,OS2), MM(OM1,OM2,OM3,OM4)
6.Diameter	mm	ф3,ф3.6,ф4.5
7.Length	М	L=1,2,3,4,5
8. Sheath	_	LSZH,OFNR.OFNP,PVC



MPO/MTP-LC Harness







Application:

- ◆ Wired satellite TV system
- ◆ Telecom operator
- ◆ Optical fiber network
- ♦ FTTH
- ♦ High-Speed transport system
- ◆ Test device
- ◆ Data Center

Optical performance:

MPO/MTP	Singlemode	Multimode
Low Insertion Loss	≤0.35dB	≤0.35dB
Standard Insertion Loss	≤0.75dB	≤0.6dB
Return Loss	≥50dB	≥20dB
Operating Temperature	-40°C~+80°C	-40°C~+80°C

LC		Multimode	Siı	ngle-mo	ode
Insertion Loss	dB	≤0.2dB		≤0.3dE	3
Return Loss	dB	≥20dB	PC ≥45dB	UPC ≥50dB	APC ≥60dB
Operation Temperature	$^{\circ}$		-40℃~	+80℃	

Feature:

- ◆ Various shaped connectors
- ◆ High-density
- ♦ Low insertion Loss
- ♦ High return loss
- ◆ Cable diameter: 3.0mm,3.6mm,4.5mm and etc. available Singlemode and Multimode

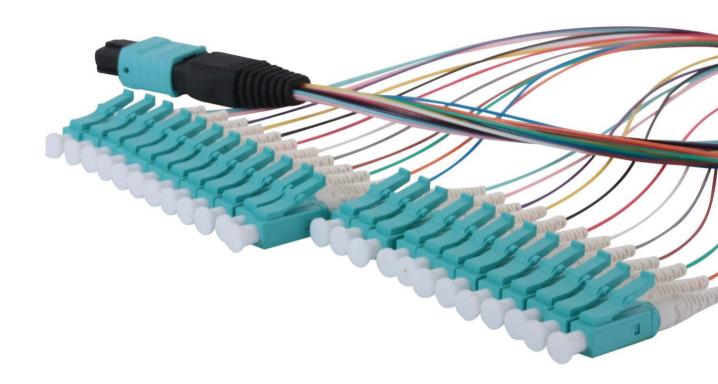
Order guide:

MPO/MTP-male/APC-LC-Uniboot PC-SMφ0.91LSZH

Item	Unit	Specification
1.Connector Type	_	MPO/MTP-Female, MPO/MTP-Male
2 Ferrule End Face)	PC, APC
3. Connector Type		LC,SC,FC
4.Furrel End Face		PC,APC
5.Fiber		SM(OS1,OS2),MM(OM1,O M2,OM3,OM4)
6.Diameter	mm	φ0.9,φ1.6,φ2.0, φ3.0,φ3.6
7.Length	М	L=1,2,3,4,5
8. Sheath	_	LSZH,OFNR.OFNP,PVC



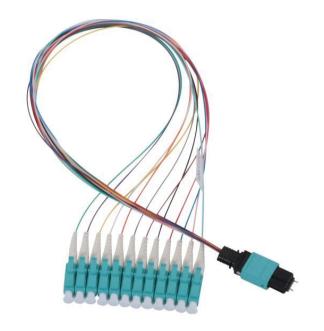
MPO/MTP-LC Harness



Optical performance

MPO/MTP	Singlemode	Multimode
Low Insertion Loss	≤0.35dB	≤0.35dB
Standard Insertion Loss	≤0.75dB	≤0.6dB
Return Loss	≥50dB	≥20dB
Operating Temperature	-40℃~+80℃	-40℃~+80℃

LC		Multimode	S	ingle-m	ode
Insertion Loss	dB	≤0.2dB		≤0.3dl	3
Return Loss	dB	≥20dB	PC ≥45dB	UPC ≥50dB	APC ≥60dB
Operation Temperature	℃		-40℃~	+80℃	



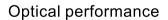


IP68

Waterproof cable



- ◆ IP68 dustproof and waterproof in harsh environment
- ◆ Simple to assemble, easy to connect
- ◆ Chemical resistance
- ◆ Operation temperature:-40°C ~+80°C
- ◆ Cost effective control for solution
- **♦** IP68



MPO/MTP	Singlemode	Multimode
Low Insertion Loss	≤0.35dB	≤0.35dB
Standard Insertion Loss	≤0.75dB	≤0.6dB
Return Loss	≥50dB	≥20dB
Operating Temperature	-40℃~+80℃	-40℃~+80℃





SC/APC Connector

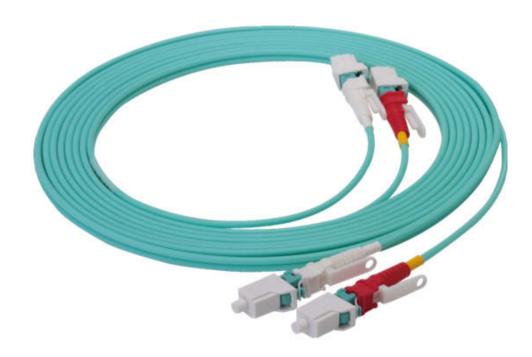
Incomtion Loop	Typical	Standard
Insertion Loss	≤0.1dB	≤0.3dB
Return Loss	≥6	0dB
Operating Temperature	-40°C~+80°C	
Operating Temperature	-40°C~+80°C	

LC/ APC Connector

Insertion Loss	Typical	Standard
insertion Loss	≤0.1dB	≤0.3dB
Return Loss	≥60dB	
Operating Temperature	-40℃~+80℃	



Patch cord





Optical performance

Connector Type		FC/UPC、FC/APC、SC/UPC、SC/APC、ST/PC、MU/PC、MU/APC、LC/APC,			
Fiber	_	Multi-mode		Single-mod	le
Sheath		PVC		LSZH	
Insertion Loss	dB	≤0.2dB		≤0.3dB	
Return Loss	dB	≥20dB	PC	UPC	APC
			≥45dB	≥50dB	≥60dB
Operation Temperature	$^{\circ}\!\mathbb{C}$	-40°C~+80°C			







LC-LC Trunk Harness



Application:

- ◆ Gigabit Ethernet
- ◆ Cable TV and Multimedia
- ◆ Optical fiber test equipment
- ◆ Telecom network

Feature:

- ♦Good 3D
- **♦**Reliable
- ◆Low Insertion Loss
- ♦ High Return Loss





Optical performance

Connector Type)	SC/LC/FC/ST			
Fiber	_	Multi-mode	Si	ngle-mo	de
Sheath		PVC		LSZH	
Insertion Loss	dB	≤0.2dB		≤0.3dB	i
Return Loss	dB	≥20dB	PC	UPC	APC
			≥45dB	≥50dB	≥60dB
Operation Temperature	∞		-40°	℃~+80℃	2

Order guide:

Item	Unit	Specification
1.Connector Type	e —	LC,SC,FC,ST
2 Ferrule End Fac	ce	PC,UPC,APC
3. Connector Typ	e	LC,SC,FC,ST
4.Furrel End Face	ə	PC, APC
5.Fiber		SM(OS1,OS2),MM(OM1, OM2,OM3,OM4)
6.Diameter	mm	ф3.0,ф4.8,ф5.2, ф6.8
7.Length	М	L=1,2,3,4,5
8. Sheath	_	LSZH,OFNR.OFNP,PVC