# **MAX ODF**

**Multiuse High-Density Modular Fiber Panel** 





#### Features:

- ✓ 1RU/2RU/4RU height options, support up to 144 LC/72 SC connections or splices per RU.
- ✓ Flexible modular design, it can be configured to provide the user with the following functions:
  - MTP/MPO solution. Convert incoming MPO cable into LCs or SC connectors or use it for straight MPO termination.
  - Front and rear split. The front of the cassette has all service ports, and the cable with the signal enters the cassette from the rear and gets spliced with the naked end of the splitter.
  - All front access split. The cassette includes terminated splitter and the feeder and service positions
    are in all the front.
  - Panel with termination only cassettes (mirror configuration).
  - Termination and splice. The cassette provides a splice chip and protective tubes for splicing.
- ✓ Separate layer cable management with 3 layers for per RU.
- ✓ Premium sliding rail.
- ✓ High-efficient front & rear cable management design.
- ✓ Color RAL 9005 black or putty white RAL 7035.
- ✓ Comply with BELLCORE GR-326, EIA/TIA 568 C and RoHS



Components:	Application:
· MPO/MTP cassette module	· Data centers installations
· Adaptor module Rear and front splitter module	·Telecommunication backbone
· Rear and front splitter module	· High density environments
· All front access splitter module	· LAN, MAN and WAN applications
· Splice module	· Inside and outside plant
· MPO/MTP trunk LC patch cord	· 40G and 100G ethernet standard interface









#### **High-Efficient Operation**

- · Modular design
- · 3-layer premium sliding rail
- · High-efficient front & rear cable management design
- · Supports standard LC, SC and MPO connectors

### High density

- · 1U up to 144 port LC connection
- · 1U up to 72 port MTP/MPO or SC
- · 1U up to 144 fiber splicing

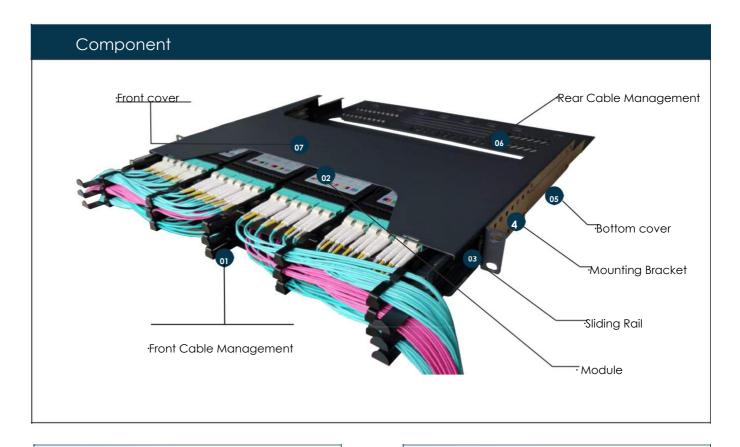
#### **High Flexibility**

- · MTP/MPO-LC conversion
- · MTP/MPO-MTP/MPO conversion
- · MTP/MPO/LC patching
- · Pigtail splicing
- · Base-12/Base-8/Base-24 cabling
- · Splitter modules for front and rear or all front access

#### Parameter:

Item	Characteristics
Operation Temperature	-20°C-+55°C
Storage Temperature	-20°C~+60°C
Relative Humidity	≤85% (+30 °C)
Air Pressure	70kPa ~106kPa
Dimensions (W x D x H)	483 mm×365 mm× (1U, 2U or 4U)







#### Metal shrapnel limit design

Each layer can be individually accessed and removed.



#### Base-12 cabling

The cassette can be taken out from the front or the back.



#### Adjustable mounting bracket

The bracket can be adjusted back and forth for easy installation and use.



### Base-8 cabling

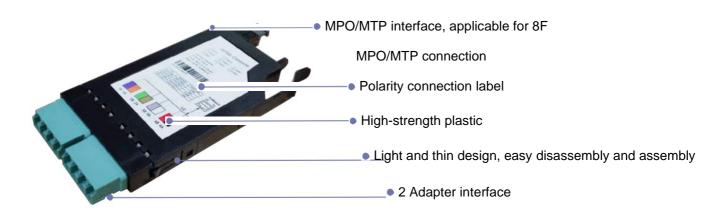
Adjust the position of the front management board to complete Base-8 cabling.



# 8 port cassettes:

Compared to the mainstream Base-12 solution, the Base-8 does not add extra cost and insertion loss, ensuring 100% utilization of the 8-core fiber transceiver system. Branch optical fiber patch cord can be easily connected to all common ports of the switch, It is the most flexible solution for 40G, 100G and 400G. Data transmission network.

Ultra-high density fiber optic MTP-LC cassettes consist of pre-terminated LC adapters, provide efficient utilization of rack space and design flexibility, offer a wide array of deployment options to support both Ethernet and Fiber Channel.



Performance	
Item	Characteristics
Fiber Mode	Multimode/Single mode
Wavelength	MM:850nm/1300nm; SM:1310nm/1550nm
Fiber category	OS2 - 9/125μm; OM3/4/5 - 50/125 μm
Module IL MAX	MPO-LC(SM) ≤1.5dB; MPO-LC(MM) ≤0.75dB MTP-LC(SM) ≤1.3dB; MTP-LC(MM) ≤0.5dB

Technical Data	
Item	Characteristics
Operation Temperature	-20° C ~+70° C
Storage Temperature	-40° C ~+75° C
Dimensions (WxDxH)	60 mm (2.36") ×96 mm (3.77") ×11. 7 mm (0.46")
Material / color	ABS/Black
Adapter type front	Shuttered LC Quad
Adapter quantity front	2 (Base-8)



# 12 port cassettes:

Cassette is tailor-made for optimizing cable management, plug and play, speed deployment, and improving flexibility and manageability for lower installation costs allow users to convert Base-12 MPO backbone trunk cables to Base-2 LC adaptors so as to match the transceivers of nearby switches and servers.

The MPO connection at the rear of the module provides a high degree of flexibility because the transition module can be easily upgraded to an MPO conversion or patching module at a later stage. This allows users to upgrade from 10G data rates (serial optics) to 40G or 100G data rates (parallel optics).



Performance	
Item	Characteristics
Fiber Mode	Multimode/Single mode
Wavelength	MM:850nm/1300nm; SM:1310nm/1550nm
Fiber category	OS2 - 9/125μm; OM3/4/5 - 50/125 μm
Module IL MAX	MPO-LC(SM) ≤1.5dB; MPO-LC(MM) ≤0.75dB MTP-LC(SM) ≤1.3dB; MTP-LC(MM) ≤0.5dB

Technical Data	
Item	Characteristics
Operation Temperature	-20° C ~+70° C
Storage Temperature	-40° C ~+75° C
Dimensions (WxDxH)	90mm (3. 54") ×130mm (5.11") ×11. 7mm (0.46")
Material / color	ABS/Black
Adapter type front	Shuttered LC Quad
Adapter quantity front	3 (Base-12)



## 24 port cassettes:

The cassette is tailor-made for cable management optimization in conjunction with the chassis, plug and play, speedy deployment, and improved flexibility and manageability of deployment cost, since you only buy what you need. The optional MPO connection at the rear of the module provides a high degree of flexibility, since the transition module can be easily upgraded to an all MPO conversion or patching module at a later stage. This feature allows users to upgrade from 10G data rates (serial optics) to 40G or 100G data rates (parallel optics).



Quadruple LC Adapter

Performance	
Item	Characteristics
Operation Temperature	-20°C ~+70°C
Storage Temperature	-40°C ~+75°C
Fiber Mode	Multimode/Single mode
	MPO-LC(SM) ≤1.5dB; MPO-LC(MM) ≤0.75dB
Module IL MAX	MTP-LC(SM) $\leq$ 1.3dB; MTP-LC(MM) $\leq$ 0.5dB
Dimensions (W x D x H)	187.5m (7.38") ×130mm (5.11") ×11.7mm (0.46")



# **Splice cassettes:**

Splice Cassettes provide the interface between the bulk cable and the LC duplex cables that connect directly into the electronics. It protects and organize heat-shrink fusion spliced fibers (up to 12 fibers) inside a cassette. The modular design enables faster field splicing and simple management of pigtails within the housing

Protective conduit can also be snapped into the rear of the module in cases where higher density cables are spliced or where non-standard cable constructions are used. Fusion splicing is generally more common in singlemode applications where operators consolidate cables into high-density cross-connect racks.



Item	Characteristics			
Fiber Mode	Multimode/Single mode			
Wavelength	MM:850nm/1300nm; SM:1310nm/1550nm			
Fiber category	OS2 - 9/125µm; OM3/4/5 - 50/125 µm			
Module IL MAX	Single mode OS2 ≤0.50dB max Multimode OM3/OM4 ≤0.50dB max			

Technical Data	
Item	Characteristics
Operation Temperature	-20°C ~+70°C
Storage Temperature	-40°C ~+75°C
Dimensions (WxDxH)	90mm (3. 54") ×130mm (5.11") ×11.7mm (0.46")
Material / color	ABS/Black
Adapter type front	Shuttered LC Quad
Adapter quantity front	3 (splice)



## MPO/MTP patch cord:





# The specifications of the two models are as follows:

- ·MPO/MTP connector over 3D test
- High quality and high performance
- Low insertion loss transmission signal is stable
- Suitable for 40G/100G high density data centers
- ·Bare fiber & 0.9mm loose tube options
- Complete solution support with 100% test
- Standard LC/SC branch connection



# Adapter:

# Description



The highest connection performance between fiber optic connectors is ensured. In order to be fixed on various panels, a variety of fine fixing flanges are also designed. Double or multicoupled adapters can increase the installation density and save space.

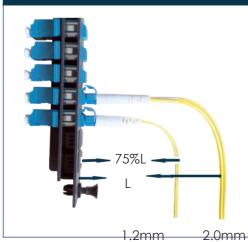
Adapter	Specification	Feature
LC quad adapter	Fiber Count: 4  Fiber Mode: OS2/OM3/OM4  Polish Type: UPC/APC  Adapter Color: Blue /Green/Aqua	<ul> <li>Perfect fit 1/3U cassette module</li> <li>IEC and Telcordia Standard</li></ul>
SC duplex adapter	Fiber Count: 2  Fiber Mode: OS2/OM3/OM4  Polish Type: UPC/APC  Adapter Color: Blue /Green/Aqua	<ul> <li>High precision</li> <li>Meet Telcordia, ANSI, TIA/EIA,</li> <li>NTT and JI standards</li> <li>Color and polarity distinction</li> <li>Stable and regular metal clip options</li> </ul>
MPO/MTP adapter	Fiber Count: 8/12/24  Fiber Mode: OS2/OM3/OM4  Key Orientation: Key Up – Key Down  /Key Up - Key Up  Adapter Color: Black /Charcoal Gray	<ul> <li>Compact design</li> <li>High density</li> <li>High precision</li> <li>Stable and regular metal clip options</li> <li>UL94-V0 and RoHS environmental material</li> </ul>



## Cable and connector:

NAME	3.0mm Cable	2.0mm Cable	1.2mm Cable
PICTURE			M. M
Color		Aqua/ Yellow	
Type	OS2/OM3/OM4		

# 1.2mm Cabling VS 2.0mm Cabling



- ·1.2mm saves more than 25% of cable management space compared to 2.0mm.
- ·1.2mm has better flexibility than 2.0mm, which makes the cabling more convenient and beautiful; at the same time does not affect the pulling force, the wiring reliability is not affected.

NAME	LC Pull-tap Uniboot	LC Uniboot	LC Length	LC Short
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PICTURE	~,		597	***
NAME	SC Simplex	MPO	MTP	
	A STATE OF THE STA			
PICTURE				



## Components

ITEMS	DESCRIPTION	CAPACITY	PICTURE
M <b>A521-1U</b>	1RU Housing, two options for 12C and 8C nodule (H*W*D) 1U*483*360mm	144 LC/72SC	CHI CHILD
A521-2U	2RU Housing, two options for 12C and 8C module (H*W*D) 2U*483*360mm	288LC/144SC	
A521-4U	4RU Housing, two options for 12C and 8C module (H*W*D) 4U*483*360mm	576 LC/288 SC	
MPB-112X	1MPO-12LC Module		
MPB-108X	1MPO-8LC Module	Entering to the second	
MPB-106X	1MPO-6ST Module		
MPB-12SPX	12LC Splice Module		
MPB-12PX	12LC Patch Module		
MPB-6XX	6MPO Patch Module		
MPB-24XX	24MPO-24LC Module		Tz,



Accessories		
ITEM	QUANTITY	PICTURE
	1 pc for 1RU/2RU	1111111 = = = = = 1111111
Rear Cable Management Tray	2 pcs for 4RU	mmm
Cable Management Clip	3 pcs	000
Hook & Loop Fastening Tie	1 roll	•
Nylon Cable Tie	6 pcs	
ID Label	1 pc	
Hose Clamp	1 pc	
M6 Cabinet Screw & Nut	4 group	
M3 Screw & Nut	3 group	1000



MAX ODF PART NUMBER					
	Chassis with accesories				
A521-1U	1RU Chassis (Empty), 144 LC/72 SC				
A521-2U	2RU Chassis (Empty ) 288 LC/144 SC				
A521-4U	4RU Chassis (Empty) 576 LC/288 SC				
	8 LC or 4 SC Port card				
MPB-1081	With LCU adaptors only (mirror)				
MPB-1082	With LCA adaptors only (mirror)				
MPB-1083	With SCU adaptors only (mirror)				
MPB-1084	With SCA adaptors only (mirror)				
MPB-08SP1	With LCU adaptors and splice				
MPB-08SP2	With LCA adaptors and splice				
MPB-08SP3	With SCU adaptors and splice				
MPB-08SP4	With SCA adaptors and splice				
MPB-108-SM-LC/MPO		SM			
MPB-108-OM3-LC/MPO	With LC adaptors to MPO (Fully loaded)	OM3			
MPB-108-OM4-LC/MPO		OM4			
MPB-108FRSPLT-2/1X4-LC	With 2 1X4 splitters to splice to cable and 8 LC				
MPB-108FRSPLT-1/1X8-LC	With 1 1X8 splitters to splice to cable and 8 LC				
MPB-108FRSPLT-1/1X4-LC	With 1 1X4 splitters to splice to cable and 4 SC				
MPB-108FFSPLT-1/1X4-LC	All front splitter card, fully connectorized splitter with 1 1X4 splitter and 8 LC				
MPB-108FFSPLT-1/1X2-SC	All front splitter card, fully connectorized splitter with 1 1X2 splitter and 4 SC				
	12 LC or 6 SC Port card				
MPB-1121	With LCU adaptors only (mirror)				
MPB-1122	With LCA adaptors only (mirror)				
MPB-1123	With 6 SCU adaptors only (mirror)				
MPB-1124	With 6 SCA adaptors only (mirror)				
MPB-12SP1	With LCU adaptors and splice				
MPB-12SP2	With LCA adaptors and splice				
MPB-12SP3	With 6 SCU adaptors and splice				
MPB-12SP4	With 6 SCA adaptors and splice				
MPB-112-SM-LC/MPO		SM			
MPB-112-OM3-LC/MPO	With LC adaptors to MPO(Fully loaded)	OM3			
MPB-112-OM4-LC/MPO	With 2 1V4 culittees to culies to coble and 12 IC	OM4			
MPB-112FRSPLT-3/1X4-LC	With 3 1X4 splitters to splice to cable and 12 LC				
MPB-112FRSPLT-1/1X8-LC MPB-112FRSPLT-1/1X4-SC	With 1 1X8 splitters to splice to cable and 12 LC				
MPB-112FFSPLT-2/1X4-SC	With 1 1X4 splitters to splice to cable and 6 SC				
MPB-112FFSPLT-2/1X4-LC	All front splitter card, fully connectorized splitter with 2 1X4 splitter and 12 LC  All front splitter card, fully connectorized splitter with 1 1X8 splitter and 12 LC				
MPB-112FFSPLT-1/1X4-SC					
MPB-112FFSPLT-1/2X4-SC	All front splitter card, fully connectorized splitter with 1 2X4 splitter and 6 SC				



	24 LC or 12 SC Port card		
MPB-2401	With LCU adaptors only (mirror)		
MPB-2402	With LCA adaptors only (mirror)		
MPB-2403	With 12 SCU adaptors only (mirror)		
MPB-2404	With 12 SCA adaptors only (mirror)		
MPB-12SP1	With LCU adaptors and splice		
MPB-12SP2	With LCA adaptors and splice		
MPB-12SP3	With 12 SCU adaptors and splice		
MPB-12SP4	With 12 SCA adaptors and splice		
MPB-240-SM-LC/MPO		SM	
MPB-240-OM3-LC/MPO	With LC adaptors to MPO(Fully loaded)	OM3	
MPB-240-OM4-LC/MPO MPB-240-SM-SC/MPO		OM4 SM	
MPB-240-OM3-SC/MPO	With SC adaptors to MPO (Fully loaded)	OM3	
MPB-240-OM4-SC/MPO		OM4	
MPB-240FRSPLT-6/1X4-LC	With 6 1X4 splitters to splice to cable and 24 LC		
MPB-240FRSPLT-3/1X8-LC	With 3 1X8 splitters to splice to cable and 24 LC		
MPB-112FRSPLT-1/1X16-LC	With 1 1X16 splitters to splice to cable and 24 LC		
MPB-240FRSPLT-3/1X4-SC	With 3 1X4 splitters to splice to cable and 12 SC		
MPB-240FRSPLT-1/1X8-SC			
-	With 1 1X8 splitters to splice to cable and 12 SC		
MPB-240FFSPLT-4/1X4-LC	All front splitter card, fully connectorized splitter with 4 1X4 splitter and 24 LC		
MPB-240FFSPLT-2/1X8-LC	All front splitter card, fully connectorized splitter with 2 1X8 splitter and 24 LC		
MPB-240FFSPLT-1/1X16-LC	All front splitter card, fully connectorized splitter with 1 1X16 splitter and 24 LC		
MPB-240FFSPLT-2/1X4-SC	All front splitter card, fully connectorized splitter with 2 1X4 splitter and 12 SC		
MPB-240FFSPLT-1/1X8-LC	All front splitter card, fully connectorized splitter with 1 1X8 splitter and 12 SC		