



**SANWA**  
TECHNOLOGIES

**High Density Cabling Solutions**



**SANWA Technologies**

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## HD Patch Panels



High density unique design patch panel, with maximum LC connectivity and cabling, adopt the high-strength environmental light weight material and superior surface treatment technique, which make the panel achieve complete function with various flexible cabling solutions.

### Features

- Aluminum or Cold-Rolled Steel 19" Patch Panel
- Accept MPO/MTP and MDC Trunk Cables
- Support MPO-LC/MDC Fan-out Assemblies or LC/SC/MDC Patch Cords
- Independent Plug-in Cassettes with Front Cable Management
- Ideal for Data Center and FTTX High-Density Applications



- |  |   |
|--|---|
| <b>1</b> Cassette module   | <b>2</b> Smart self-lock design for easy inserting/pulling of cassettes |
| <b>3</b> Environmental light-weight design with anodized surface treatment | <b>4</b> Cassette compatible with SC, LC, MPO, and MDC adapters         |
| <b>5</b> Side mounting bracket with flexible adjustment design             | <b>6</b> Pocket label convenient for label printing and replacement     |





- 1** Design with reserved space for cable in with 24f splicing connection
- 2** Each cassette supports 4 MPO/MTP adaptors, available for 1x24, 2x12 and 3x8 LC and 4x12 MDC solutions
- 3** Panel with independent cable management frame to fix the trunk cables



1U Patch Panel



2U Patch Panel

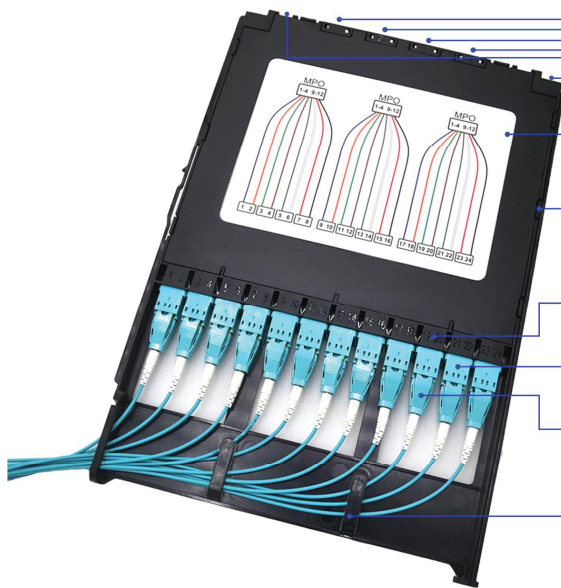


4U Patch Panel

### Specifications

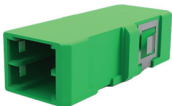




Patch Panel Type	1U Patch Panel	2U Patch Panel	4U Patch Panel
Capacity	72F SC	144F SC	288F SC
	144F LC	288F LC	576F LC
	288F MDC (2-Port Adapters)	576F MDC (2-Port Adapters)	1152F MDC (2-Port Adapters)
	432F MDC (3-Port Adapters)	864F MDC (3-Port Adapters)	1728F MDC (3-Port Adapters)
Cassette Quantity	6	12	24
Fan-out Cables/Patch Cords	MPO/MTP-MDC/LC/SC Fan-out Cables or MDC/LC/SC Patch Cords		
Dimensions	435 x 460 x 44 mm	435 x 460 x 88 mm	435 x 460 x 176 mm
Weight (including cassettes)	3.7 kg	6.4 kg	11.2 kg
Operating Temperature	-20°C to +60°C		

## Cassette Modules







- 4 MPO interface for 8F /12F/24F MPO-LC and 4\*12F MTP-MDC connection
- Press type lockers to lock and open cassettes easily
- Label for clear observation
- High-strength environmental plastic and manual clip design ensures easy operation
- Adaptor labeling
- Multi adapter options (see tables below)
- Multi connector options (see tables below)
- Innovative design, prevent over bending

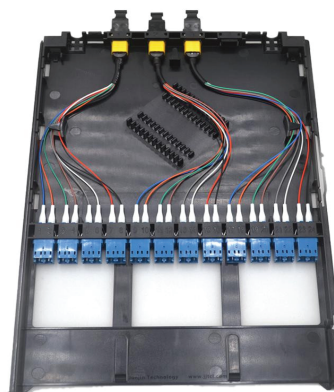
### Adapter Options

2-Port MDC	3-Port MDC	MPO/MTP	Shuttered LC Duplex	SC Simplex
				

### Connector Options

LC Uniboot	LC Push-Pull Uniboot	LC Duplex	SC Simplex
			

### MPO/LC Cassette Modules



3 MPO-8/24 LC Cassette



2 MPO-12/24 LC Cassette

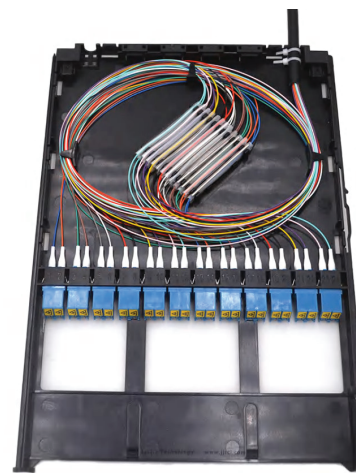


1 MPO-24/24 LC Cassette

### Splitter/Splice Cassette Modules



3\* 1X8 PLC Splitter Cassette



24 Splice Cassette

## LC Connectors & Adapters

### LC Connectors

Provide unique solutions for high density cabling systems. Our design offers high capacity, better air flow, easier and simpler cable management.



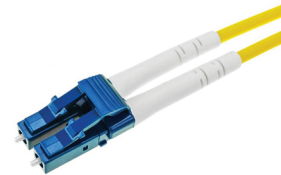
#### Standard Uniboot Connectors

- Super Easy Polarity Reversal
- PC/APC, SM/MM, and Multi-color options
- High Density Applications
- IEC61754-20 and GR326 Compliant
- Compact Design
- Suitable for HD Cassette
- UL94-V0 Inflammability Grade Compliant



#### Push-Pull Uniboot Connectors

- PC/APC, SM/MM, and Multi-color options
- Higher Density Solution
- IEC61754-20 and GR326 Compliant
- Compact Design
- UL94-V0 Inflammability Grade Compliant
- Pull-Push Anti-intertwine Design



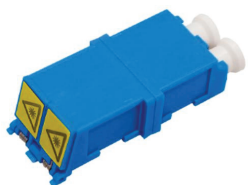
#### LC Duplex Connectors

- Switchable Connector for Polarity Change
- SM/MM and PC/APC Available
- IEC61754-20 and GR326 Compliant
- UL94-V0 Inflammability Grade Compliant
- RoHS Compliant

### LC Adapters

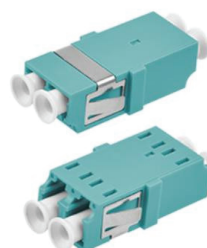
Provide environmental protection and data transmission stability in data centers thanks to the dust proof and light blocking features of the shuttered adapters.

#### LC Duplex Inner Shutter Adapters



- Duplex and Quad Options
- Well Match with LC Uniboot Connectors
- Smart design to avoid ferrule contact shutter plate
- SM/MM and Multi-Color Options
- Patented Stable Metal Clip Design

#### LC Duplex Flangeless Adapters



- SC Simple Footprint
- Stable and Regular Metal Clip Options
- Perfect Fit for 1/3U Cassette Modules
- IEC and Telcordia Standard Complaint
- UL94-V0 and RoHS Environmental Material

## MPO Connectors & Adapters

### MPO Connectors

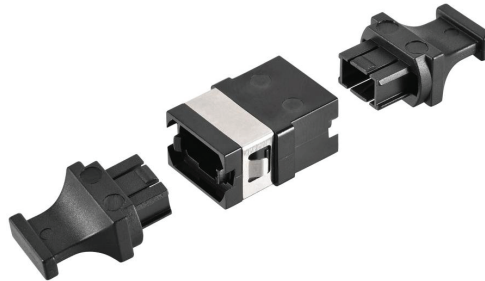
Available as standard or low loss singlemode/multimode connectors with 8F, 12F, 24F, regular force spring, and high force spring versions.

- 8/12/16/24/32F Options
- SM/MM and Multi-Color Options
- Smart Push-Pull Tab Design
- IEC 61754-7 and GR-1435 Complaint
- UL94-V0 Inflammability Complaint
- RoHS Complaint

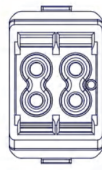
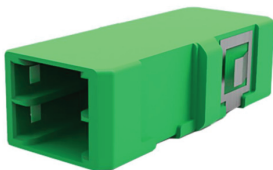


### MPO Adapters

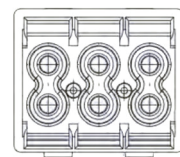
- Stable Metal Clip for Easy Installation
- Available in Several Standard Colors
- Available without Flange
- UL94-V0 Environmental Material
- RoHS Complaint



## MDC Adapters



**MDC 2-Port Adapter**



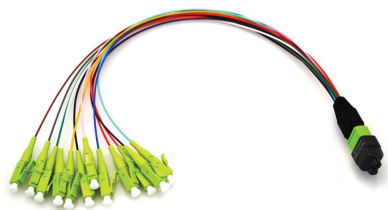
**MDC 3-Port Adapter**

Cassettes can be installed with MDC 2 Ports and 3 Ports as above to double and triple the capacity.

- High density up to 4 or 6 fibers in one SC simplex footprint panel cutout
- Available in SC footprint for easy implementation
- Easy to clean with well-known tools
- MM, SM, and SM APC available

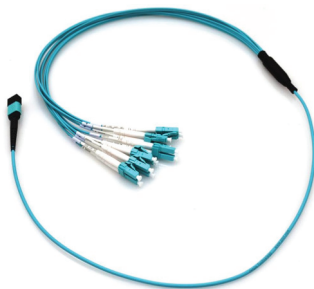


### MPO/MTP-LC/SC/MPO/MTP Cable Assemblies



**MPO/MTP-LC/SC Short Fan-out Patch Cord**

- MPO-LC/SC 8F/12F/24F Fan-out Patch Cord in Cassette
- Length: 30cm
- Yellow, Green, Aqua, Erika Violet, etc.
- MPO/MTP-LC/SC Available Housing Colors
- Bare Fiber and 0.9mm Buffer Options



**MPO/MTP-LC/SC Fan-out Patch Cord**

- Standard MPO/MTP-LC/SC Connection
- 8F, 12F, 24F Cores Available
- LC Uniboot and SC Connector Options
- 2.0mm Jacket and 0.9mm Buffer Options
- Complete Solution Support with 100% Test
- All Cable Twined as per Cassette



**MPO/MTP-MPO/MTP Trunk Cable**

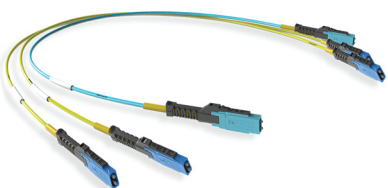
- Customized Trunk Cable Length
- 24F-288F Termination are Available
- Various Colors Available
- OFNR, OFNP, LSZH, PE Jacket Options
- Complete Solution Support with 100% Test

### MPO/MTP/MDC-MDC Cable Assemblies

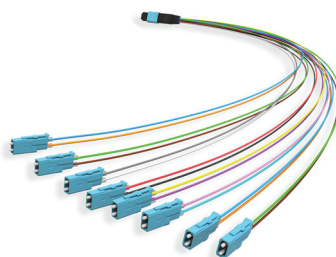
MDC Patch Cables incorporate US Conec MDC which is a Very Small Form Factor (VSFF) duplex optical connector with proven 1.25mm ferrule technology while tripling times the fiber density over LC duplex connectors. The MDC duplex patch cables are mainly used in high-density applications and for cross-connection between patch panels or distribution boxes with products that contain optical fibers.

MPO to MDC Hybrid Trunk Cables enable one QSFP-DD, QSFP28, or QSFP+ transceiver to be connected to MDC patch panels or cassettes. With MDC, the port density can be tripled compared to LC duplex and thus decisively save space in the rack.

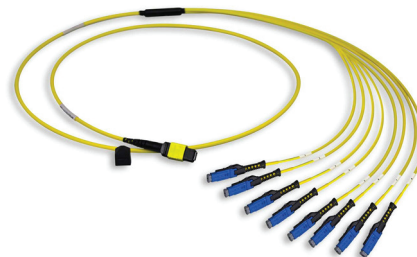
**SM/MM MTP/MPO Low Loss** < 0.35dB  
**MDC IL** < 0.3dB  
**Operating Temperature** -10°C to +70°C (14°F to 158°F)



**MDC Patch Cable**



**MPO-MDC Fan-out Cable in Cassette**



**MPO-MDC Hybrid Trunk Cable**



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