

# DATASHEET

## 8F/12F/16F/24F MPO (Male) -LC Fan-out 0.9mm 30cm

Ideal for Data Center High Density Cabling System

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RoHS



OMC INDUSTRY CO.LIMITED



## 8F/12F/24F MPO(male) -LC Fan-out 0.9mm 30-35cm Patch cable

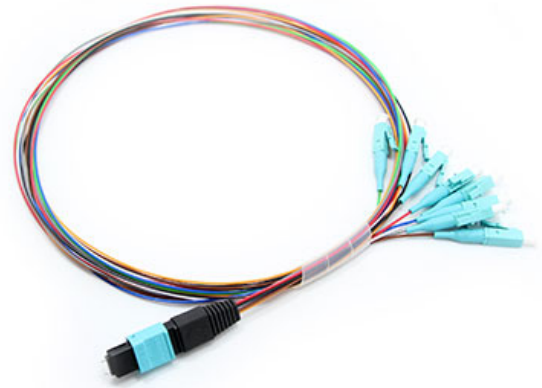
### Description

**MPO (male)-LC/SC/FC/ST Fan-out 0.9mm 30cm patch cable** are designed for **MPO-LC LGX module cassettes** are terminated with **MPO and LC/SC/FC/ST** connector on each end. It's specifically designed for high-density fiber patching in data centers which need space saving and reduce cable management troubles.

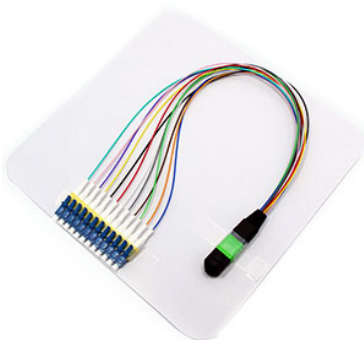
**SM 8F MPO- LC/SC/FC/ST Fanout 0.9mm cable** are optimized for 40G QSFP+ PLR4 to 10G SFP+ LR optics direct connection and high-density data center applications.

**OM3/OM4 8F MPO- LC/SC/FC/ST Fanout 0.9mm cable** are optimized for 40G QSFP+ SR4 to 10G SFP+ SR, 100G QSFP SR4 to 25G SFP-25G-SR-S optics direct connection and high-density data center applications.

This 8 Fiber harness cable is used for a direct connection between QSFP+ to (4) SFP+ ports with no patch panels or intermediate trunks in between.



| Connector                                                                          | Fiber Channel                                                                       |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |
| MPO Male Connectors                                                                | 8 Fibers                                                                            |
| Note: Female connector need to connect with male connector type.                   |                                                                                     |



**12F MPO- LC/SC/FC/ST Fanout 0.9mm cable** is designed for 40G LR4 PSM, 40GBASE-SR4, 40G QSFP+ PLR4 and high-density data center. It is optimized for 10/40/100G high-density data center applications. This 12 Fiber harness cable is used for connecting (6) SFP+ into a MPO adapter panel and MPO trunk.

| Connector                                                                           | Fiber Channel                                                                        |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |
| MPO Male Connectors                                                                 | 12 Fibers                                                                            |
| Note: Female connector need to connect with male connector type.                    |                                                                                      |

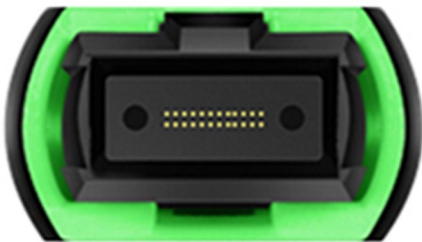


## 8F/12F/24F MPO(male) -LC Fan-out 0.9mm 30cm Patch cord

### 24F MPO- LC/SC/FC/ST Fanout 0.9mm cable

**24F MPO- LC/SC/FC/ST Fanout 0.9mm cable** is designed for 100GBASE-SR10 CXP/CFP Interconnect Solution, 100GBASE-LR4 and high-density data center. It is optimized for 10/40/100G high-density data center applications. This 24 Fiber harness cable is used for connecting (12) SFP+ into a MPO adapter panel and MPO trunk.



| Connector                                                                         | Fiber Channel                                                                      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|  |  |
| MPO Male Connectors                                                               | 24 Fibers                                                                          |
| Note: Female connector need to connect with male connector type.                  |                                                                                    |

### Products Materials

| Connector      | Reference   | Housing Details                                                                                                                                                                                             |
|----------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MPO Singlemode | IEC 61754-7 | SM APC: Green connectors+black boot (Standard Loss MPO)<br>SM APC: Yellow connectors+black boot (Super low loss MPO)                                                                                        |
| MPO Multimode  | IEC 61754-7 | OM1&OM2 PC: Beige connectors+black boot (Standard Loss MPO)<br>OM3&OM4 PC: Aqua connectors+black boot (Standard&Super low loss MPO)<br>OM3&OM4 PC: Heather Violet connectors+black boot (Standard loss MPO) |

Meets IEC Standard IEC-61754-7; IEC61755, Telcordia GR-1435-CORE, JIS C5982; TIA-604-5(FOCIS5) compliant  
Structured cabling per TIA-568-C  
10G Fiber Channel Compliant

### Other connectors' Industrial Standard:

SC: TIA/EIA, FOCIS3, GR-326.NTT-SC IEC61754-4 and JIS C5973.  
LC: TIA/EIA, FOCIS10, GR-326 EIA/TIA-604-10, IEC61754-20 and JIS C5973.  
FC: EIA /TIA-604-04, FOCIS4, NTT-FC, GR-326. IEC61754-13 and JIS C5973  
ST: TIA/EIA, FOCIS2, GR-326. IEC61754-2 and JIS C5973 Etc.  
E2000: IEC61754-15

### Available for

G657A1 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000  
G657A2/B2 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000  
G657B3 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000  
OM1 62.5/125 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000  
OM2 50/125 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000  
OM3 50/125 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000  
OM4 50/125 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000  
OM5 50/125 MPO-LC, MPO-SC, MPO-FC, MPO-SC, MPO-ST, MPO-E2000



## 8F/12F/24F MPO(male) -LC Fan-out 0.9mm 30cm Patch cord

### Optical Specifications

| Spec items.                                     | Single mode (APC 8-degree polished)                                                                                                                                               | Multimode (PC Flat polish)                                                                                                                                              |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Insertion loss (MPO)<br>(IEC 61300-3-34)        | Standard loss: $\leq 0.75\text{dB}(\text{max})$ , $\leq 0.50\text{dB}(\text{Typical})$<br>Super Low loss: $\leq 0.35\text{dB}(\text{max})$ , $\leq 0.20\text{dB}(\text{Typical})$ | Standard loss: $\leq 0.6\text{dB}(\text{max})$ , $\leq 0.50(\text{Typical})$<br>Super Low loss: $\leq 0.35\text{dB}(\text{max})$ , $\leq 0.20\text{dB}(\text{Typical})$ |
| Insertion loss (LC/SC/FC/ST)<br>(IEC 61300-3-6) | $\leq 0.3\text{dB}$                                                                                                                                                               | $\leq 0.3\text{dB}$                                                                                                                                                     |
| Return loss(MPO)                                | $\geq 60\text{dB}$ (8degree polishing)                                                                                                                                            | $\geq 25\text{dB}$                                                                                                                                                      |
| Return loss(LC/SC/FC/ST)                        | APC $\geq 60\text{dB}$ ; UPC $\geq 50\text{dB}$                                                                                                                                   | $\geq 35\text{dB}$                                                                                                                                                      |
| Durability                                      | $< 0.3\text{dB}$ typical change, 200 matings                                                                                                                                      |                                                                                                                                                                         |
| Interchangeability                              | $\leq 0.2\text{dB}$                                                                                                                                                               |                                                                                                                                                                         |
| Tensile strength                                | $> 70\text{N}$                                                                                                                                                                    |                                                                                                                                                                         |
| Operating Temperature                           | $-40$ to $+ 85^{\circ}\text{C}$                                                                                                                                                   |                                                                                                                                                                         |

### MPO End-Face 3D Interference Index

| Item (IEC-61300-3-30)    |            |     | Minimum | Maximum |
|--------------------------|------------|-----|---------|---------|
| Radius of curvature (mm) | ROC-X(ABS) |     | 2000    | \       |
|                          | ROC-Y(ABS) |     | 50mm    | \       |
| Angle                    | Angle-X    |     | -0.2°   | -0.2°   |
|                          | Angle-Y    | APC | 7.85°   | 8.15°   |
|                          |            | PC  | -0.2°   | -0.2°   |
| Fiber height (nm)        |            |     | 1000nm  | 3500nm  |
| Max.DH.All Fiber:        |            |     | -300nm  | 300nm   |
| DH.Adj:                  |            |     | -300nm  | 300nm   |
| DH.Ave Fiber:            |            |     | -300nm  | 300nm   |
| Core Dip:                | SM         |     | N/A     | N/A     |
|                          | MM         |     | -200nm  | 300nm   |

### LC/SC/FC/ST End-Face Geometry 3D Interference Index

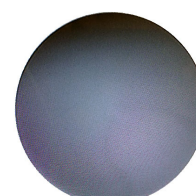
| Items                  | Connector                   | PC End-face | APC End-face |
|------------------------|-----------------------------|-------------|--------------|
| Radius of Curvature    | SC/FC/ST                    | 10~25 mm    | 5~12 mm      |
|                        | LC/MU                       | 7~25 mm     | 5~15 mm      |
| Apex Offset            | $\leq 50 \mu\text{m}$       |             |              |
| Fiber Spherical Height | $\pm 100 \text{ nm}$        |             |              |
| Angular Offset         | $8^{\circ} \pm 0.5^{\circ}$ |             |              |

### End-face Quality (LC/SC/FC/ST SM)

| Zone               | Range ( $\mu\text{m}$ ) | Scratches | Defects | Reference           |
|--------------------|-------------------------|-----------|---------|---------------------|
| A: Core            | 0 to 25                 | None      | None    | IEC 61300-3-35:2015 |
| B: Cladding        | 25 to 115               | None      | None    |                     |
| C: Adhesive        | 115 to 135              | None      | None    |                     |
| D: Contact         | 135 to 250              | None      | None    |                     |
| E: Rest of ferrule |                         | None      | None    |                     |



SM UPC



SM APC

### End-face Quality (LC/SC/FC/ST MM)

| Zone               | Range ( $\mu\text{m}$ ) | Scratches | Defects | Reference           |
|--------------------|-------------------------|-----------|---------|---------------------|
| A: Core            | 0 to 65                 | None      | None    | IEC 61300-3-35:2015 |
| B: Cladding        | 65 to 115               | None      | None    |                     |
| C: Adhesive        | 115 to 135              | None      | None    |                     |
| D: Contact         | 135 to 250              | None      | None    |                     |
| E: Rest of ferrule |                         | None      | None    |                     |



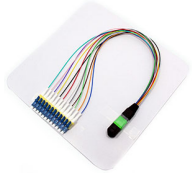
MM PC



## 8F/12F/24F MPO(male) -LC Fan-out 0.9mm 30cm Patch cord

### Packaging

This easily taken and well-protected fiber patch cable package has been labelled and marked by OMC as default .Standard carton size : 34\*22\*15 cm; 44\*34\*24 cm ; 54\*39\*34 cm . Which carton to be used depends on goods Qty . Packing can be customized.



1,Paper Board+Self-seal PE Bag



2 Bubble Bag



3, Paper Carton



4,fumig-free Pallet

### OME service

1. Cable color, printing word, material of cable jacket, connector's color
2. OEM Label, Identify ring, cable's label, box, shipping marks
3. Different quality Level.

### Order Index

| Products                        | Fibers     | Fiber mode  | Connector A                | Connector B                    |
|---------------------------------|------------|-------------|----------------------------|--------------------------------|
| M1-Senko MPO                    | 1-8Fibers  | 1- G652D    | 1-SM Standard Female       | 1-LC UPC standard              |
| M2-MTP Male                     | 2-12Fibers | 2-G657A1    | 2-SM Standard male         | 2-LC APC standard              |
| M3-China brand MPO              | 3-16Fibers | 3-G657A2/B2 | 3-SM super low loss Female | 3-SC UPC Standard connector    |
| M4-Senko MPO with pull/Push tab | 4-20Fiber  | 4-G657B3    | 4-SM super low loss male   | 4-FC UPC Standard connector    |
| M5-MTP with pull/Push tab       | 5-24Fibers | 5-OM1 BIF   | 5-MM Standard Female       | 5-ST UPC Standard connector    |
|                                 |            | 6-OM2 BIF   | 6-MM Standard male         | 6-SC APC Standard connector    |
|                                 |            | 7-OM3 BIF   | 7-MM super low loss Female | 7-FC APC Standard connector    |
|                                 |            | 8-OM4 BIF   | 8-MM super low loss male   | 8-E2000 UPC Standard connector |
|                                 |            | 9-OM5 BIF   |                            | 9-E2000 APC Standard connector |