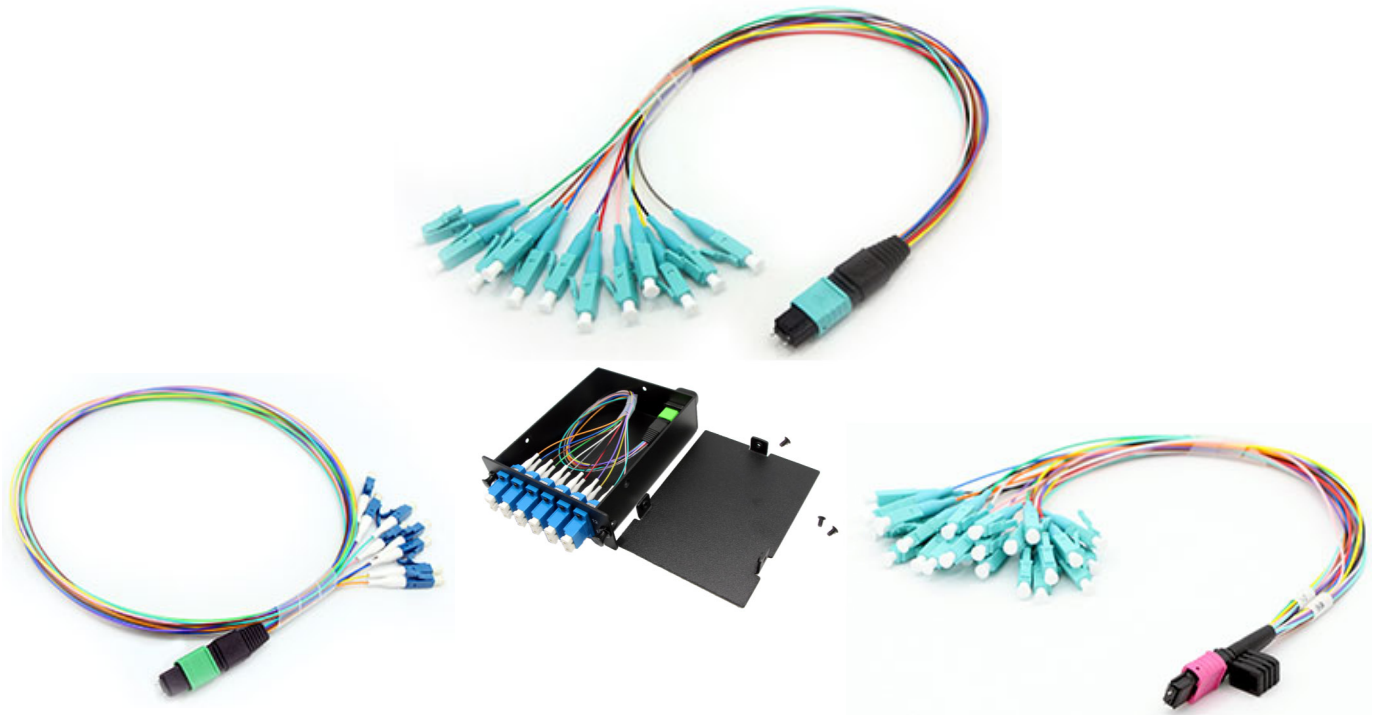


# DATASHEET

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

Ideal for Data Center High Density Cabling System

---



OMC INDUSTRY CO.LIMITED

2018|En version1.0



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

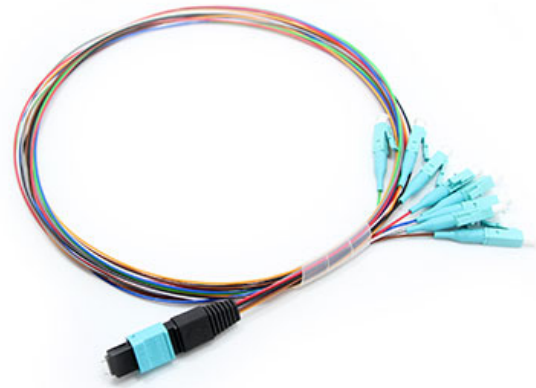
### Description



**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.

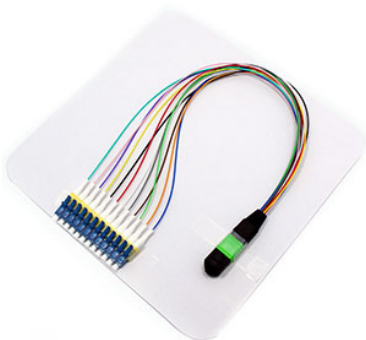
**SM 8F MPO- LC/SC/FC/ST Fanout 0.9mm cable** are optimized for 40G QSFP+ PLR4 to 10G SFP+ LR optics direct connection and high-density data center applications.

**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.

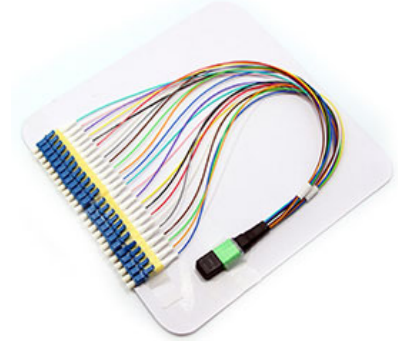
Connector	Fiber Channel
	
MPO Male Connectors	12 Fibers
Note: Female connector need to connect with male connector type.	





## 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) 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) OM3&OM4 PC: Aqua connectors+black boot (Standard&Super low loss MPO) 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) (IEC 61300-3-34)	Standard loss: $\leq 0.75\text{dB}(\text{max}), \leq 0.50\text{dB}(\text{Typical})$ Super Low loss: $\leq 0.35\text{dB}(\text{max}), \leq 0.20\text{dB}(\text{Typical})$	Standard loss: $\leq 0.6\text{dB}(\text{max}), \leq 0.50(\text{Typical})$ Super Low loss: $\leq 0.35\text{dB}(\text{max}), \leq 0.20\text{dB}(\text{Typical})$
Insertion loss (LC/SC/FC/ST) (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	$-0.2^\circ$	$-0.2^\circ$
	Angle-Y	APC $7.85^\circ$ PC $-0.2^\circ$	$8.15^\circ$ $-0.2^\circ$
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

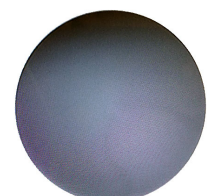
Items	Connector	PC End-face	APC End-face
Radius of Curvature	SC/FC/ST	10~25 mm	5~12 mm
	LC/MU	7~25 mm	5~15 mm
Apex Offset		$\leq 50 \mu\text{m}$	
Fiber Spherical Height		$\pm 100 \text{ nm}$	
Angular Offset		-----	$8^\circ \pm 0.5^\circ$

### 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	



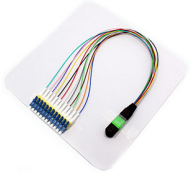
MM PC



## 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