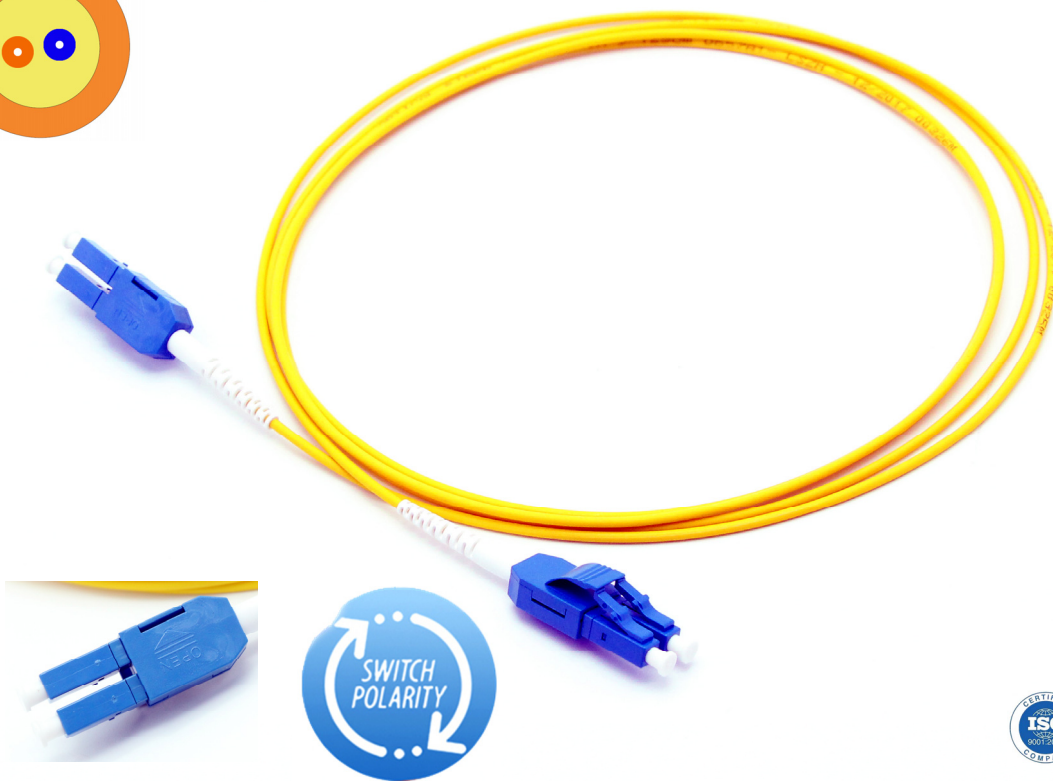
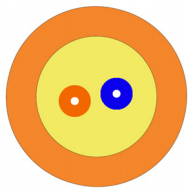


DATA SHEET

Polarity Switchable uniboot LC-LC Fiber patch cable V1

Designed for high-density fiber patching in data centers, LAN, WAN etc. which need space saving.



RoHS



OMC INDUSTRY CO.LIMITED

2018|En version1.0



Polarity Switchable uniboot LC-LC Fiber patch cord V1

Description

The **Uniboot patch cable** utilizes a special “round duplex” cable that allows duplex transmission within a single cable, and it reduces cable management space comparing to standard patch cables.

As the networking environment of today becomes increasingly dependent on high speed and high density solutions, effective cable management is a real issue. The key concern is how to manage more cable in a smaller amount of space.

Our uniboot fiber patch cable reduces cable management space by up to 40% compared to standard patch cables. The patch cable utilizes a special “round duplex” cable that allows duplex transmission within a single 3mm cable. As a result of these features our uniboot patch cable offers improved airflow and visibility of equipment within a high density network environment. Our uniboot patch cable is available in a wide variety of cable materials including LSZH, Plenum and Riser.

OMC's **LC Uniboot cable assemblies** offer the best solution for high-density applications, data centers, interconnect and cross connector, private networks and premise installations.

Products Materials

	Polarity Switchable uniboot LC connector with Chinese independent intellectual property rights . Meet and Compatible with many International Standard LC: TIA/EIA, FOCIS10, GR-326 EIA/TIA-604-10, IEC61754-20 and JIS C5973.	
12mm boot	15mm boot	28.5mm boot

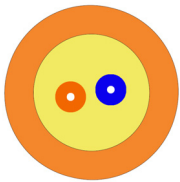


Polarity Switchable uniboot LC-LC Fiber patch cord V1

Products Materials



Perfect match with Standard LC ferrule, No need to develop special LC ferrule flange, Save cost
High quality SM Ceramic ferrule, Good concentricity<0.5um
High quality MM Ceramic ferrule, Good concentricity<4.0um



G652D,G657A1,G657A2/B2,G657B3,OM1,OM2, OM3, OM4, OM5 Fibers
2.0-3.5mm OD Uni-tube cable;
PVC (Riser/OFNR), LSZH, Plenum (OFNP) Jacket materials

Standard Compliance

- TIA 604 (FOCIS)
- TIA/EIA 492AAAE
- IEC 61754
- IEC 60793-2-10
- IEC61300-3-35
- YD/T1272.1-2003
- RoHS, ISO9001 Compliant

Features

- High quality zirconia ferrules.
- Good repeatability and interchange.
- Flame-retardant, rugged and durable jacket.
- 100% optically tested for insertion loss to ensure high quality

Application

- Data Center
- Enterprise
- Fiber to the X (FTTX)
- LAN and WAN
- CATV Network
- Telecommunications Network

Optical specification:

Fiber Connector	Uniboot LC to Uniboot LC	Fiber Type	SM:Yellow/Blue/White; OM1&OM2: Orange; OM3:Aqua; OM4:Aqua/Violet/ Magenta
Cable OD&Jacket	1.6/2.0mm&PVC/LSZH	Fiber Counts	2 Fibers
Insertion Loss	$\leq 0.3\text{dB}$ (IEC Grade C) $\leq 0.12\text{dB}$ (IEC Grade B)	Return Loss	SM UPC $\geq 50\text{dB}(\text{min})$ SM APC $\geq 60\text{dB}(\text{min})$ MM PC $\geq 35\text{dB}(\text{min})$
Pull-out Force	100N	Durability	500 Cycles
AB Polarity Switchable	Available	Operating Temperature	-40 to + 85°C

Geometric Specification(if Customer requested)

Items		Parameter	
Polishing		PC	APC
ROC	LC	7~ 25	5 ~ 12
Apex Offset		≤ 50	
Fiber Spherical Height		± 100	
Angle		± 0.5	8 ± 0.5

Polishing Method



UPC (Ultra-Polished connector)



APC (8 degree Polished connector)



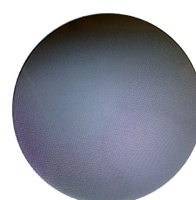
Polarity Switchable uniboot LC-LC Fiber patch cord V1

End-face Quality (SM)

Zone	Range (μm)	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 (MM)

Zone	Range (μm)	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

Length Tolerance



Overall Length(L)(m)	length of tolerance(cm)
$0 < L < 1$	+5/-0
$1 < L < 10$	+10/-0
$10 < L < 40$	+15/-0
$40 < L$	+0.5% x L/-0

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,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.

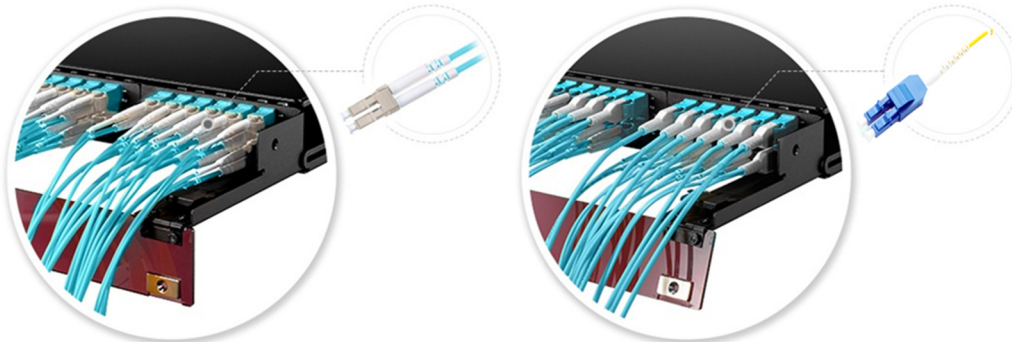


Polarity Switchable uniboot LC-LC Fiber patch cord V1

High-Quality & More Compact- 60% Increase in Density

Uniboot Cable VS. Standard Cable

Uniboot cable has thinner body and can reduce more surface area than standard cable.

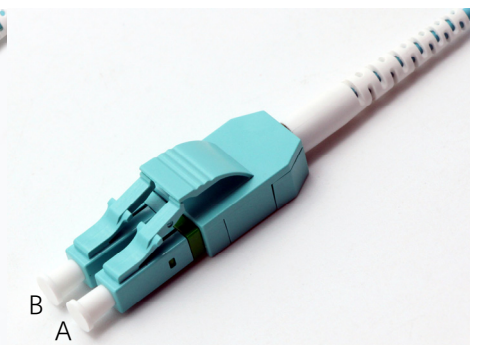
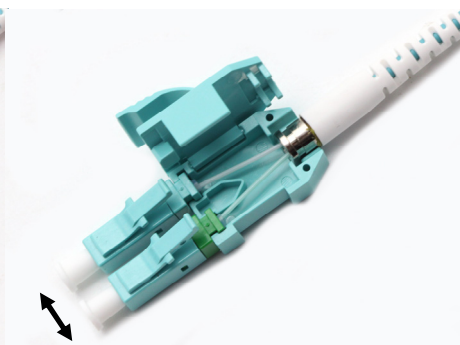
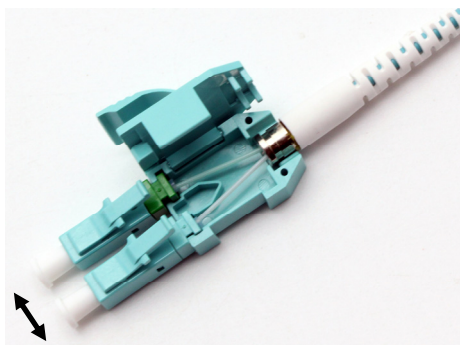
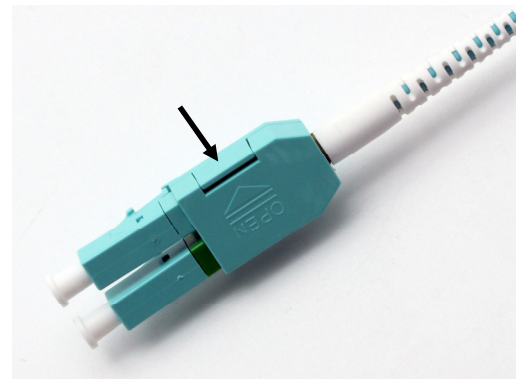
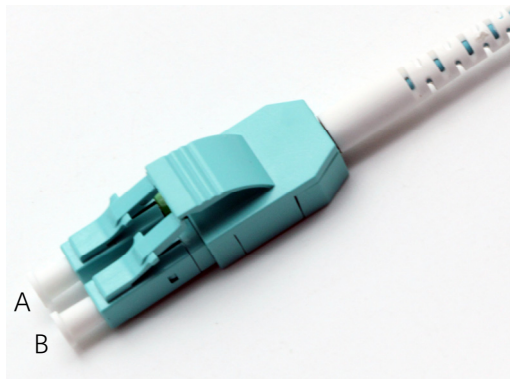


Standard Cable

Uniboot Cable

Easy Polarity Switchable

You just need to open the cover, Exchange the LC front housing position then lock the cover, It's done. Every one can do it easily.





Transmission Distance Comparison

Data Rate	Interface Type	Fiber Mode	Wavelength	Maximum Distance
1G	1000BASE-LX	OM5	850nm	550m
		OM4	1300nm	550m
		OM3	1300nm	550m
		OM2	1300nm	550m
		OM1	1300nm	550m
		SMF	1310nm	10km
	1000BASE-SX	OM4	850nm	550m
		OM3	850nm	550m
		OM2	850nm	550m
		OM1	850nm	275m
10G	10GBASE-SR	OM4	850nm	400m
		OM3	850nm	300m
		OM2	850nm	82m
		OM1	850nm	33m
	10GBASE-LRM	OM5	850nm	220m
		OM3	1300nm	220m
		OM2	1300nm	220m
		OM1	1300nm	220m
	10GBASE-LR	SMF	1310nm	10km
	10GBASE-ER	SMF	1550nm	30-40km
	10GBASE-ZR	SMF	1550nm	80-100km
40G	40G-BIDI	OM5	850nm	200m
		OM4	850nm	150m
		OM3	850nm	100m
	40GBASE-SR4	OM5	850nm	150m
		OM4	850nm	150m
		OM3	850nm	100m
	40G-SWDM4	OM5	850nm	440m
		OM4	850nm	350m
		OM3	850nm	240m
	40GBASE-LR4	SMF	1310nm	10km



Transmission Distance Comparison

Data Rate	Interface Type	Fiber Mode	Wavelength	Maximum Distance
100G	100GBASE-SR4	OM5	850nm	100m
		OM4	850nm	100m
		OM3	850nm	70m
	100G-SWDM4	OM5	850nm	150m
		OM4	850nm	100m
		OM3	850nm	75m
	100GBASE-SR10	OM4	850nm	125m
		OM3	850nm	100m
	100GBASE-LR4	SMF	1310nm	10km
	100GBASE-ER4	SMF	1310nm	40km

How to Choose The Right Fiber Optic Cable Type?

Designation	Fiber Dia. (μm)	Type	Fast Ethernet 100BASE-FX	1 Gigabit Ethernet 1000BASE-SX	1 Gigabit Ethernet 1000BASE-LX	10Gbps Ethernet 10GBASE	40Gbps Ethernet 40GBASE SR4	100Gbps Ethernet 100GBASE SR4
OM1	62.5/125	Multi-mode	2000 Meters	275 Meters	550 Meters	33 Meters	Not supported	Not supported
OM2	50/125	Multi-mode	2000 Meters	550 Meters	550 Meters	82 Meters	Not supported	Not supported
OM3(Laser Optimized)	50/125	Multi-mode	2000 Meters	550 Meters	550 Meters	300 Meters	100 Meters (SR4)	100 Meters (SR4)
OM4(Laser Optimized)	50/125	Multi-mode	2000 Meters	550 Meters	550 Meters	400 Meters	150 Meters (SR4)	150 Meters (SR4)
Singlemode	9/125	Single-mode	2000 Meters	5km at 1310nm	5km at 1310nm	10km at 1310nm	N/A	N/A

PS:The difference of OM4 and OM3 fiber mode as the following

1. OM4 was developed specifically for VCSEL laser transmission and allows 10 Gig / second link distances of up to 550 Meters (compared to 300M with OM3).
2. The effective modal bandwidth for OM4 is more than double that of OM3.
3. For OM4 patch cable it is 4700 MHz.km while for OM3 it is 2000 MHz.km.



Polarity Switchable uniboot LC-LC Fiber patch cord V1

Order Instruction

Patch cord	Quality level	Fiber Mode	Connector A	Connector B	Cable Size	Out jacket	Cable color	Length
A	R1-Standard Quality, No Geometric request	1-G652D	A-Uniboot LC UPC V1 Connector	A-Uniboot LC UPC V1 Connector	0- 1.7/18mm	H-LSZH	A - Blue	1=1m
		2-G657A1	B-Uniboot LCUPC V2 Connector	B-Uniboot LCUPC V2 Connector	1- 2.0mm	C-PVC	B- Orange	2=2m
		3-G657A2/B2	C-Polarity Switchable Uniboot LC UPC Push-Pull Tab Connector V1	C-Polarity Switchable Uniboot LC UPC Push-Pull Tab Connector V1	2- 3.0mm	R-OFNR	C- Green	
	R2-Standard Quality, Geometric passed request	4-G657B3	D-Polarity Switchable Uniboot LC UPC Pull Tab Connector V1	D-Polarity Switchable Uniboot LC UPC Pull Tab Connector V1	3 - 3.5mm	P-OFNP	D- Brown	
		5-BIF OM1	E-Polarity Switchable Uniboot LC UPC Pull Tab Connector V2	E-Polarity Switchable Uniboot LC UPC Pull Tab Connector V2			E- Grey	
		6-BIF OM2	F-Polarity Switchable uniboot LC UPC with flat Clip Connector	F-Polarity Switchable uniboot LC UPC with flat Clip Connector			F- White	
	R3 -IEC Grade B Quality No Geometric request	7-BIF OM3	1-Uniboot LC APC V1 Connector	1-Uniboot LC APC V1 Connector			G- Red	
		8-BIF OM4	2-Uniboot LCAPC V2 Connector	2-Uniboot LCAPC V2 Connector			H- Black	
		9-BIF OM5	3-Polarity Switchable Uniboot LC APC Push-Pull Tab Connector V1	3-Polarity Switchable Uniboot LC APC Push-Pull Tab Connector V1			I- Yellow	
	R4 -IEC Grade B, Geometric passed request	1-Coring G652D	4-Polarity Switchable Uniboot LC APC Pull Tab Connector V1	4-Polarity Switchable Uniboot LC APC Pull Tab Connector V1			J- Purple	
		2-Coring G657A1	5-Polarity Switchable Uniboot LC APC Pull Tab Connector V2	5-Polarity Switchable Uniboot LC APC Pull Tab Connector V2			K- Pink	
		3- Coring G657A2/B2	6-Polairty Switchable uniboot LC APC with flat Clip Connector	6-Polairty Switchable uniboot LC APC with flat Clip Connector			L- Aqua	
		4-Coring G657B3	7-Polarity Switchable uniboot LC-LC Fiber patch cord V1	7-Polarity Switchable uniboot LC-LC Fiber patch cord V1			M- Magenta	
		5-Coring OM1						
		6-Coring OM2						
		7-Coring OM3						
		8-Coring OM4						
		9-Coring OM5						