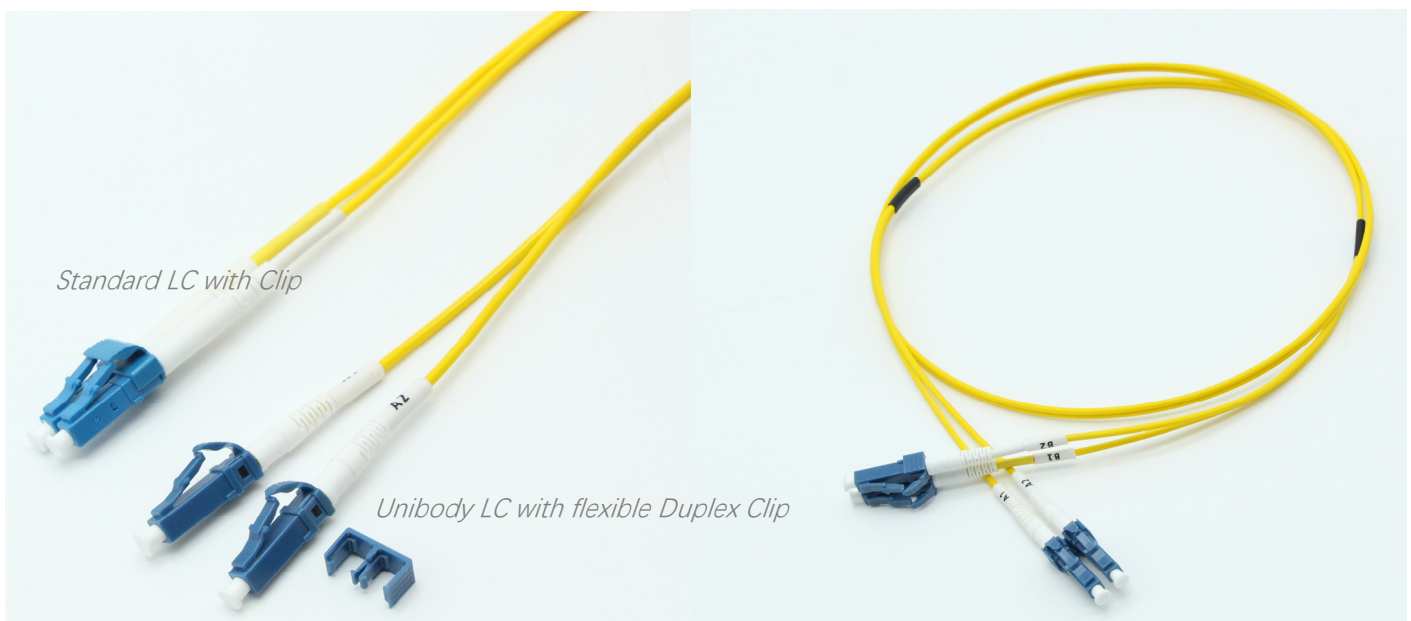


DATA SHEET

Unibody LC Patch cord/Pigtail



RoHS



OMC INDUSTRY CO.LIMITED

2018|En version1.0



Unibody LC Patch cord/Pigtail

Description

Unibody LC Patch cord/Pigtail is a new kind of LC patch cables which assembled with our New **generation UNIBODY LC connector**. As everyone knows that traditional LC housing included 2pieces. But our Unibody LC is just one piece. The first advantage is much stable and can withstand bigger surface impact force than standard LC. Of course, this Unibody LC connector have more advantages. At the same time, It has a flexible Clip, can be assembled and unassembled easily. **So good for polarity changeable and Simplex&Duplex changeable.**

Advantages

	<p>Standard LC housing kits, Two Pieces. Must assembly together to use</p> <p>With Chinese independent intellectual property rights. Unibody LC housing kits, one Pieces Design, Much stable and can withstand bigger surface impact force , Stable Connection guarantee.</p>
<p>Standard LC with a long boot. Total is 52mm</p> <p>Unibody LC with a short boot. Total is 42mm, Good for HD Cabling and save space</p>	
<p><i>Unibody LC clip</i></p>  <p><i>Standard LC clip</i></p> 	<p>Standard LC clip is almost Fully closed, Hard to assembly and unassembled,</p> <p>Unibody LC Flexible clip is Semi-closed, Easy to Assembly and unassembled. So good for polarity changeable and Simplex&Duplex changeable.</p> <p>The Clip is available for 0.9-3.0mm boot.</p> 
	<p>Perfect match with Standard LC ferrule, No need to develop special LC ferrule flange, Save cost</p> <p>High quality SM Ceramic ferrule, Good concentricity<0.5um</p> <p>High quality MM Ceramic ferrule, Good concentricity<4.0um</p>

Products Details



Unibody LC with 0.9mm Boot

Available for
SM Blue, APC green, MM Beige
OM3 Beige; OM4 Magenta



Unibody LC with 1.2mm Boot

Available for
SM Blue, APC green, MM Beige
OM3 Beige; OM4 Magenta



Unibody LC with 2.0mm Boot

Available for
SM Blue, APC green, MM Beige
OM3 Beige; OM4 Magenta



Unibody LC with 3.0mm Boot

Available for
SM Blue, APC green, MM Beige
OM3 Beige; OM4 Magenta

Connector Standard

LC: TIA/EIA, FOCIS10, GR-326 EIA/TIA-604-10, IEC61754-20 and JIS C5973.

Optical Specifications-Standard quality

Insertion loss	≤0.25dB Mean (Standard)	Interchangeability	≤0.2dB
Return loss	SM UPC ≥ 50dB SM APC ≥ 60dB MM PC ≥ 35dB	Vibration	≤0.2dB
Polarity	A(Tx) to B(Rx)	Maximum pulling force	100N

Optical Specifications-IEC Grade B quality

Insertion loss	≤0.12dB mean, ≤0.25dB max. for >97% of sample	Interchangeability	≤0.2dB
Return loss	SM UPC ≥ 50dB SM APC ≥ 60dB MM PC ≥ 35dB	Vibration	≤0.2dB
Polarity	A(Tx) to B(Rx)	Maximum pulling force	100N

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)



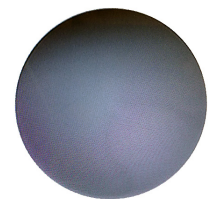
APC (8 degree Polished connector)

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

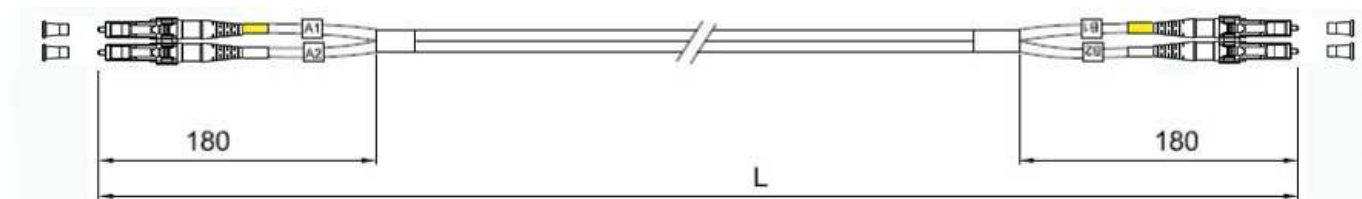
End-face Quality (MM)

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

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

Packaging

This easily taken and well-protected fiber optical 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.

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.