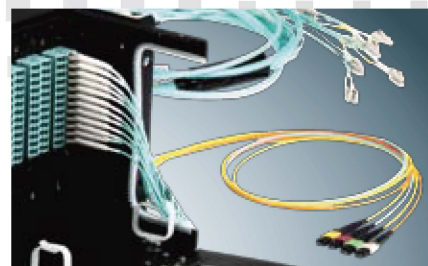
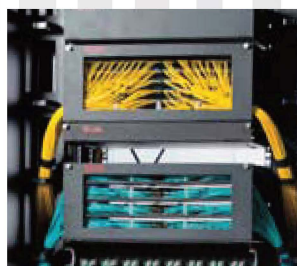




# FLEXIBLE

NETWORK PHYSICAL  
INFRASTRUCTURE SOLUTIONS

# 2023





FLEXIBILITY

PRACTICAL

ACCOMMODATIVE



**MINI-LC  
PATCHCORD**  
P.32



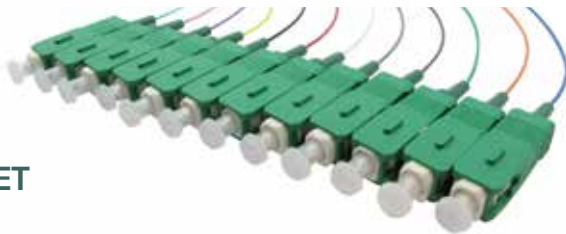
**LC-UNIBOOT  
PATCHCORD**  
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**IP68 MPO  
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P.132



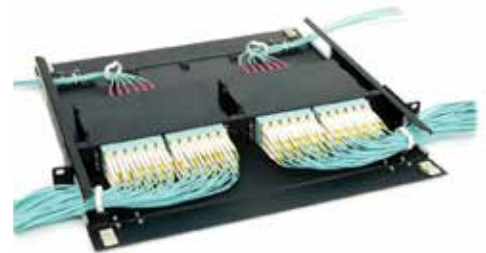
**12-COLOR  
PIGTAILS SET**  
P.44



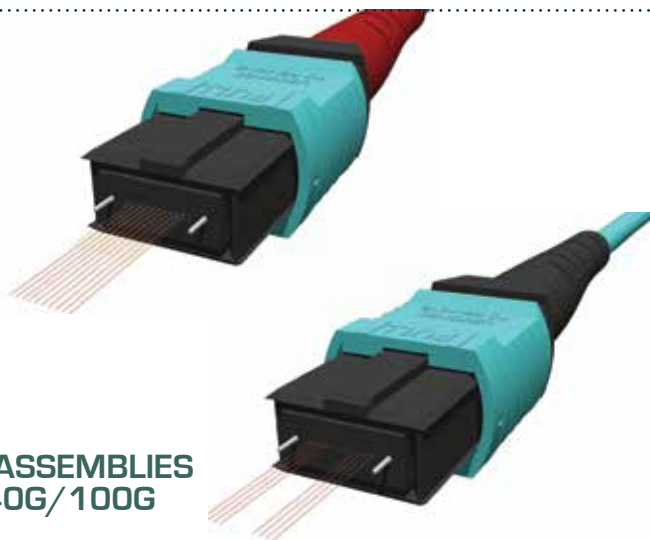
# NEW PRODUCT



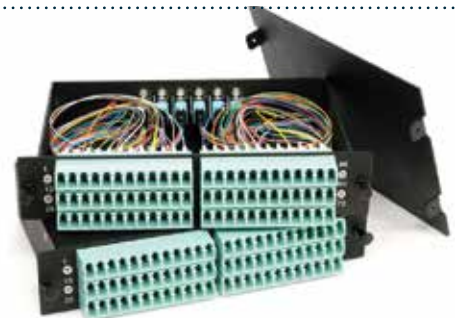
**D200 - 1U ENCLOSURE WITH CABLE  
MANAGEMENT RINGS FOR SPLICING/PATCHING**  
P.78



**HD PLUG-AND-PLAY  
ENCLOSURES**  
P.98



**MPO ASSEMBLIES  
FOR 40G/100G**  
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**HD MPO CASSETTE MODULES**  
P.99

# OLABS

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**❏ TELECOM, FTTx P.12**

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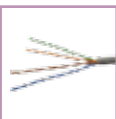


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# ABOUT OLABS

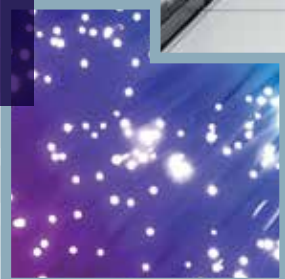


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Olabs specializes in customer-oriented design and supply of  
**FLEXIBLE NETWORK  
PHYSICAL INFRASTRUCTURE SOLUTIONS**

for various sectors. Our fiber, copper and rack systems are deployed in Data Centers, Enterprise Networks, Transportation Networks, Broadcast and CATV Networks, as well as Telecom and FTTx sectors.

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With over a decade of experiences in the industry, our team of expertise is dedicated to provide you with professional knowledge that meets market needs. Our products are fully supported by manufacturing facilities which span across precision engineering, metal casting, metal component fabrication, fiber optic and copper structured cabling assemblies. All manufacturing facilities are ISO 9001 certified for ensuring high quality management systems.

Olabs develops superior products and solutions in close collaboration with customers, ensures that they meet the needs of customers and other stakeholders while meeting statutory and regulatory requirement related to the products. Our structured cabling and modularized racking system could be either used as a fully integrated solution, or flexibly **ACCOMMODATIVE** to other coherent solutions in part or in whole. With customer-driven focus mindset, our **FLEXIBLE SOLUTIONS** will support you to substantially **IMPROVE COST STRUCTURE** and to enhance asset utilization. With Olabs, it helps expanding your revenue opportunities by reducing TCO (Total Cost of Ownership) and to achieve better ROI (Return on Investment).

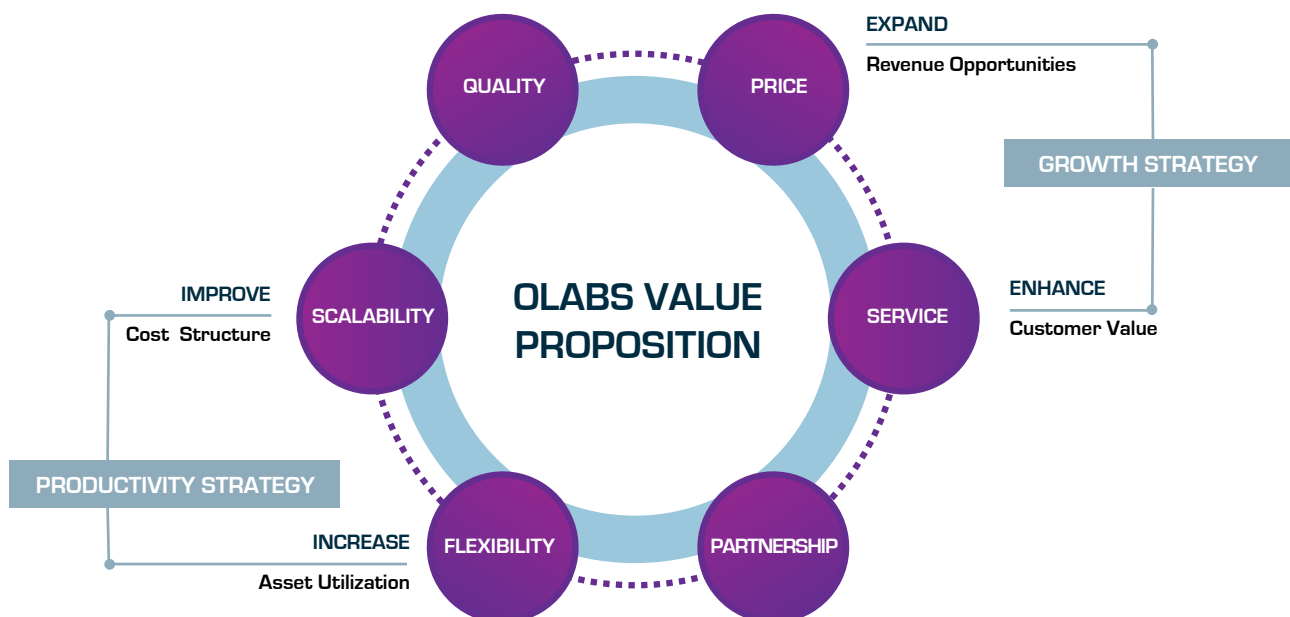
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# OUR VALUE

The initial and ongoing satisfaction of the end user is the goal of every business. Olabs dedicated to achieve customer satisfaction and to establish a lasting business relationship by delivering superior customer values.

Olabs committed to offer **FLEXIBLE** network physical infrastructure solutions that bring about customer values by reinforcing the concept of flexibility, modularity and integration. We drive to enable organizations to manage their most vital network system through our highly reliable and market competitive product solutions. Our flexible solutions address the needs and requirements for today's and tomorrow's network infrastructure, by adapting to rapid network growth and new technologies that push network limits.

## WE HELP YOU REACH YOUR MISSION-CRITICAL OBJECTIVES!



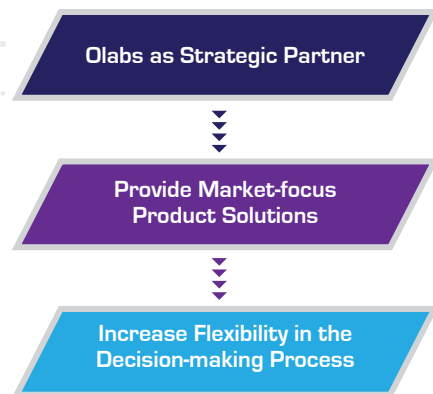




- COMMITTED TO QUALITY
- MARKET COMPETITIVE PRICING

We are committed to providing excellent product solutions that anticipate and exceed our clients' expectations. Our long-term commitment to quality begins with executive endorsement and continues throughout the organization. Without compromising quality and sacrificing market competitiveness, we work out the best balance to offer our product solutions in an innovative and cost effective manner to maximize profits of our clients.

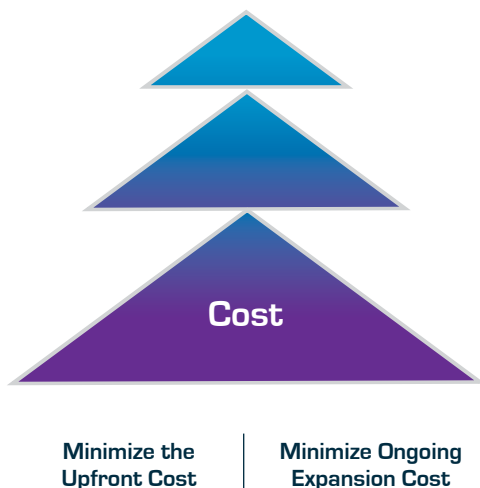
Our **SUPERIOR PRODUCT QUALITY** and **MARKET COMPETITIVE PRICING** aim to support you to expand revenue opportunities by enhancing Return on Investment (ROI) and improving Total Cost of Ownership (TCO), thus helping you to be one step ahead of competition.



- STRATEGIC PARTNERSHIP
- COMMITTED SERVICE

We work in close collaboration with clients by delivering professional know-how and experience in manufacturing and supply of innovative and **MARKET-FOCUS PRODUCT SOLUTIONS**. By addressing real market needs and keeping close track on the latest technology trends, we **WORK AS STRATEGIC PARTNER** of our clients to overcome the challenges of today's ever-changing IT technology development. We aim to **INCREASE FLEXIBILITY IN THE DECISION-MAKING PROCESS** of our strategic partners, from the decision on the best deployment of product solutions, to the decision of new product development endorsement.

Olabs is dedicated to provide optimal product solutions by combining our extensive knowledge with our passion for providing excellent customer service before, during and after the sales. With service orientation in mind, we continuously seek to improve each customer's experience by listening and striving to exceed our commitments.

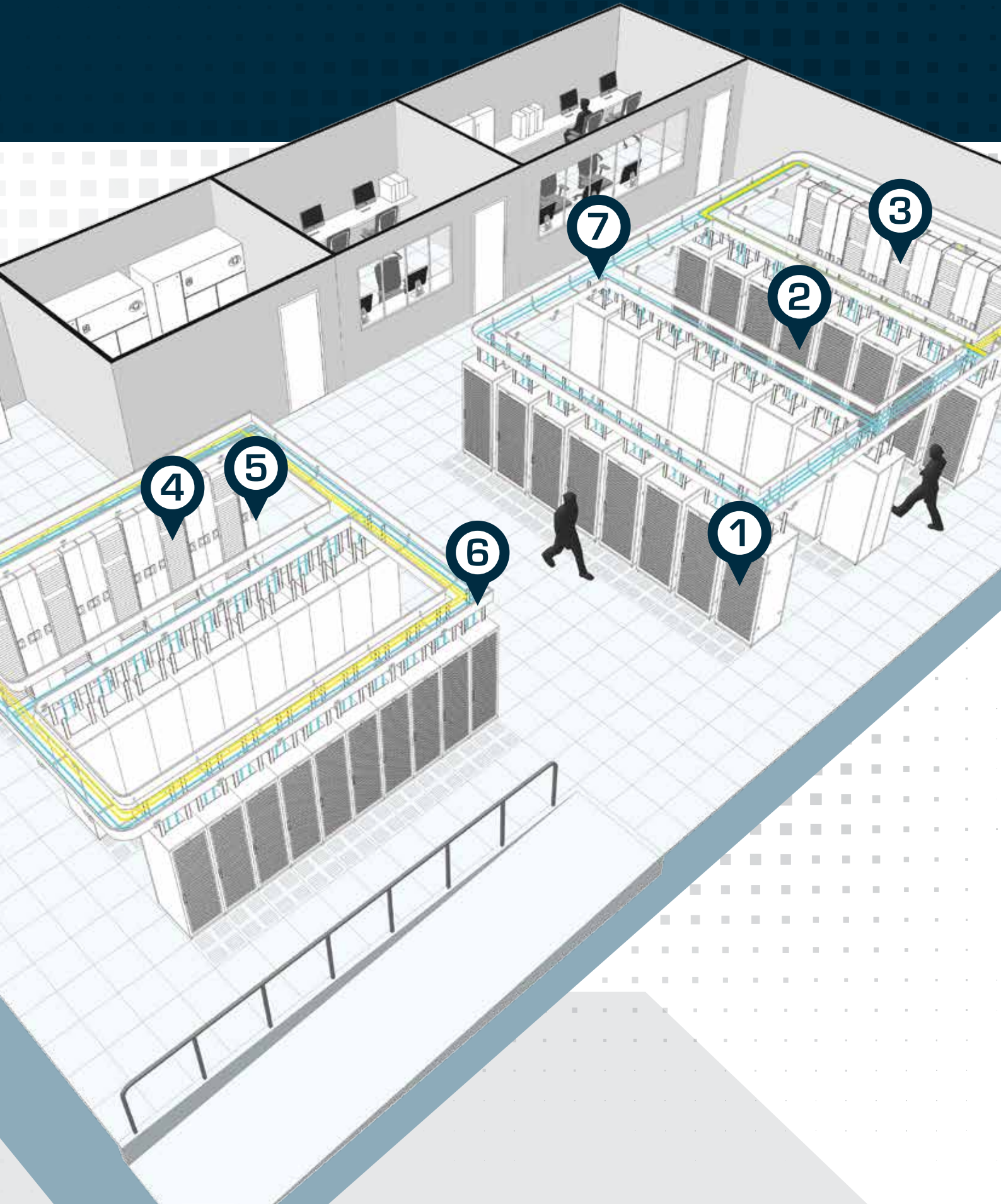


- FLEXIBILITY
- ACCOMMODATIVE

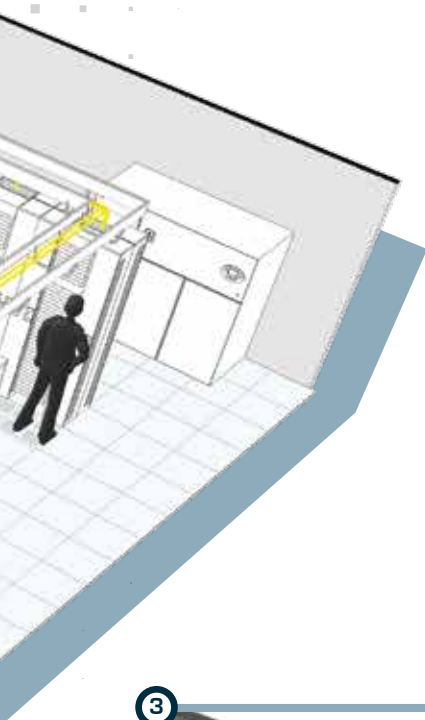
The foundation of design of our product solutions is to **OPTIMIZE** network physical infrastructure by emphasizing **SCALABILITY AND FLEXIBILITY**. Our structured cabling and rack solutions are designed in a modular and scalable manner to match ever-changing needs of network development. They are engineered and designed by following the principles of simplicity, yet providing a flexible, versatile and reliable solution for your most stringent applications. Our product solutions are flexibly **ACCOMMODATIVE** to other brands coherent solutions in part or in whole. With **CUSTOMER-DRIVEN CUSTOM ADAPTATION** in mind, our flexible solutions support you to improve cost structure and to enhance asset utilization.

Our solutions achieve its scalability and flexibility through these inherent qualities, not only support you to **MINIMIZE UPFRONT COST**, our modular design rack solutions and comprehensive fiber and copper series help providing highly flexible mix-and-match bundling features that **MINIMIZE ONGOING EXPANSION COST**.

# OUR NETWORK SOLUTIONS



# DATA CENTERS



**CABINETS/  
POWER DISTRIBUTION UNITS/  
KVM SWITCHES/  
SLIDING SHELVES**

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**HD PLUG-AND-PLAY  
ENCLOSURES**

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**UTP PATCH PANELS**

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**OPEN RACKS**

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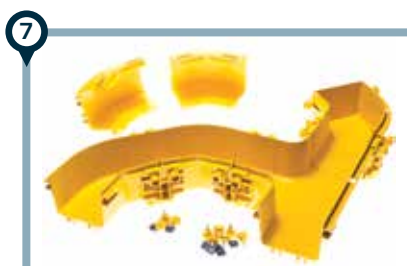
**VERTICAL CABLE MANAGERS**

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**MPO TRUNK ASSEMBLIES**

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**FIBER RACEWAYS**

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# OUR NETWORK SOLUTIONS



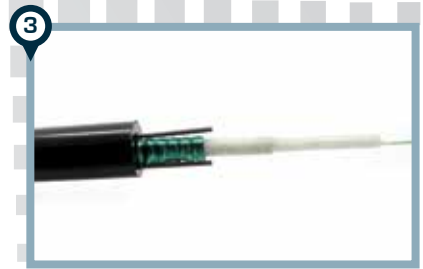
**SC NO POLISH CONNECTOR**

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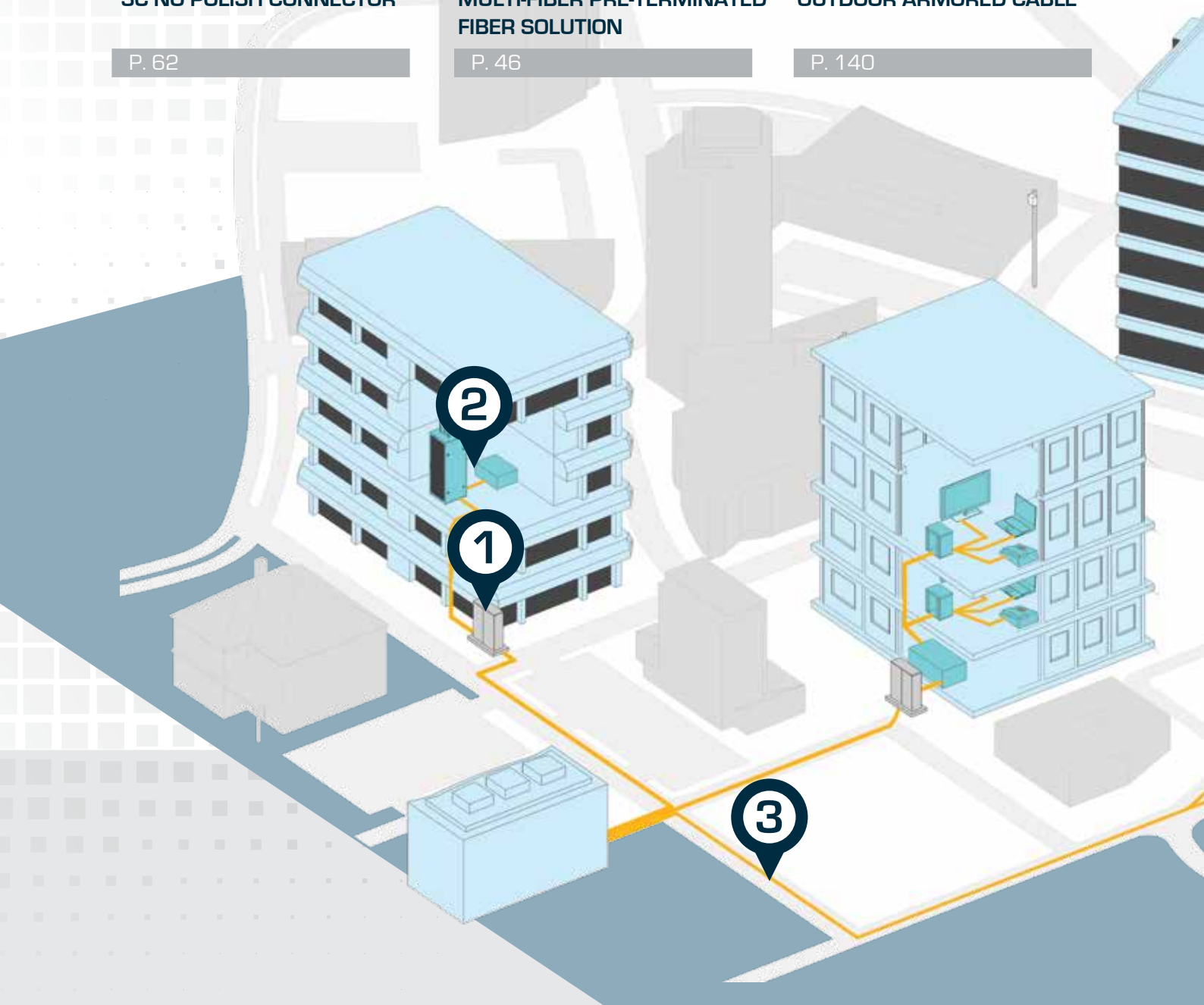
**MULTI-FIBER PRE-TERMINATED FIBER SOLUTION**

P. 46

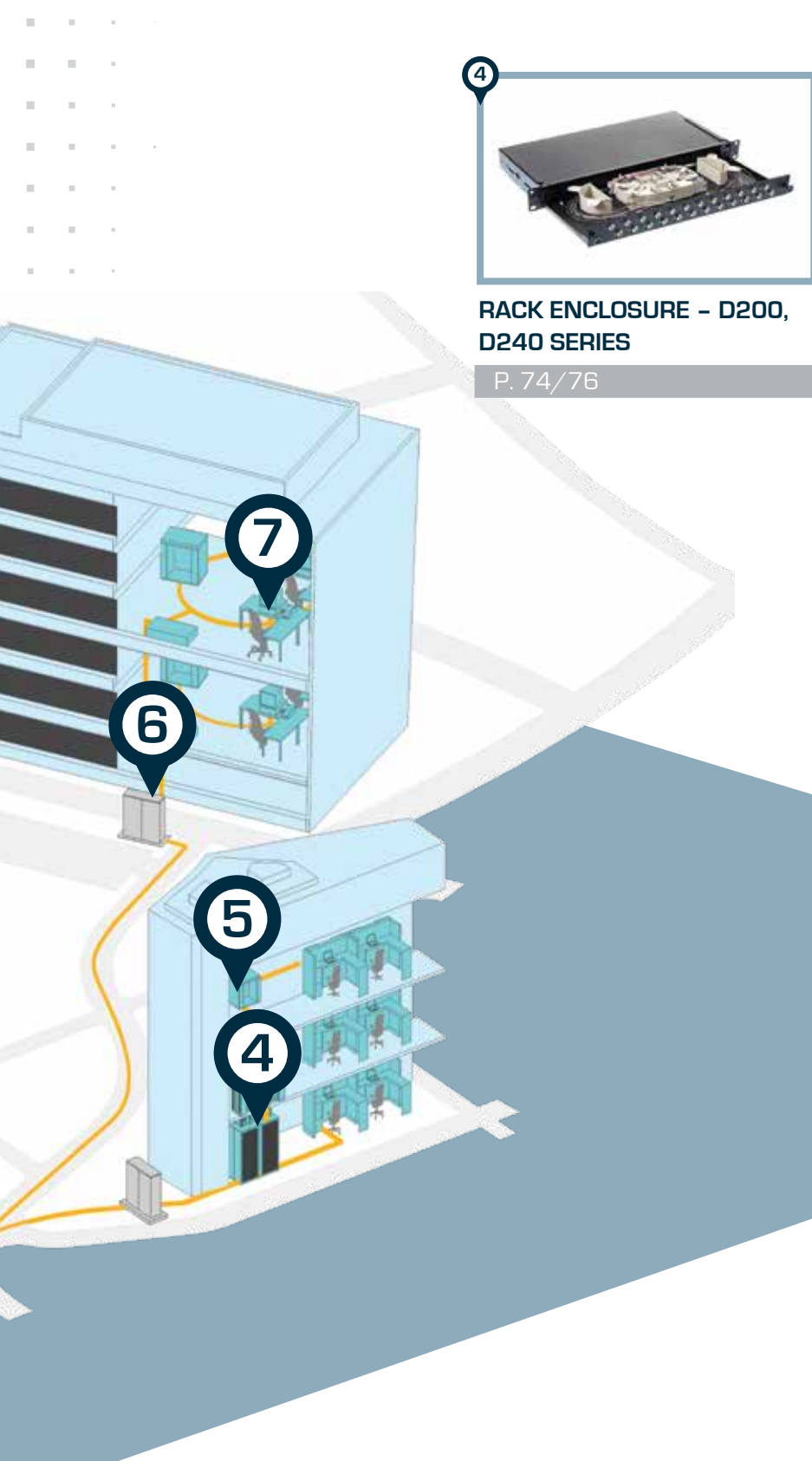


**OUTDOOR ARMORED CABLE**

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# TELECOM, FTTx



**RACK ENCLOSURE - D200,  
D240 SERIES**

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**WALLMOUNT ENCLOSURE**

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**OUTDOOR CABINETS WITH  
AIR-CONDITIONING UNIT**

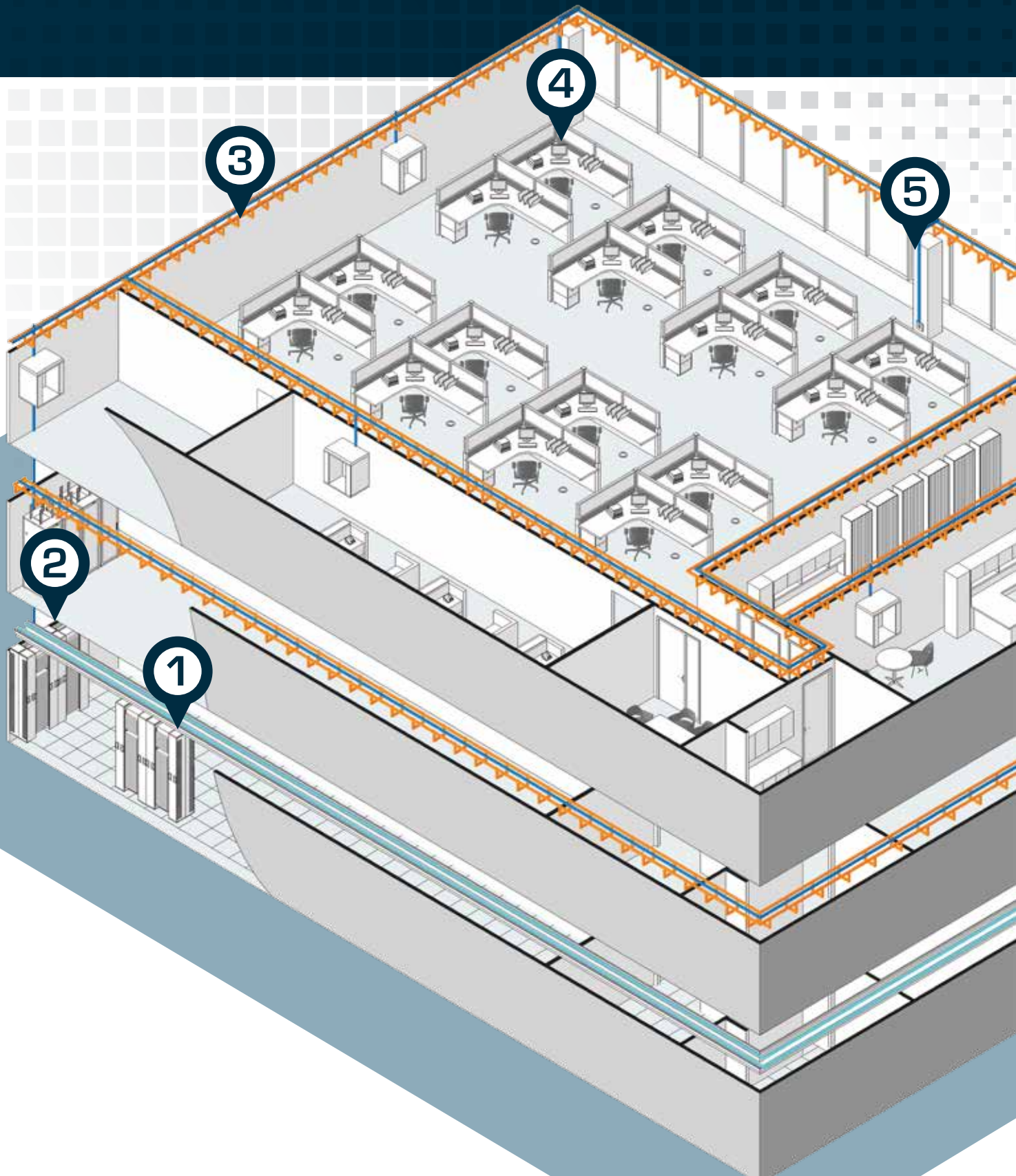
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**FIBER OUTLETS**

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# OUR NETWORK SOLUTIONS





# ENTERPRISES

1



**CABINETS/OPEN RACKS/  
VERTICAL CABLE MANAGERS**

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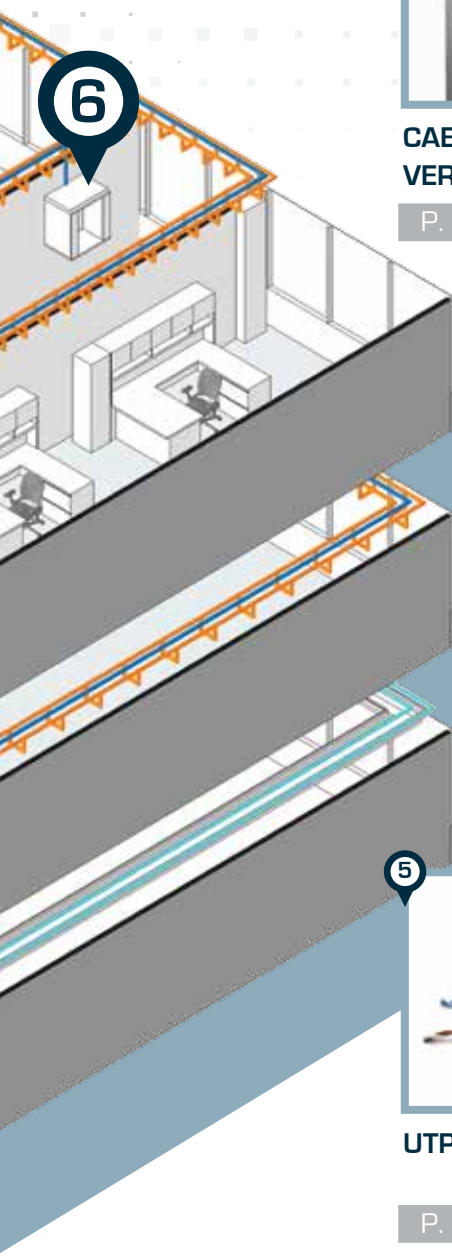
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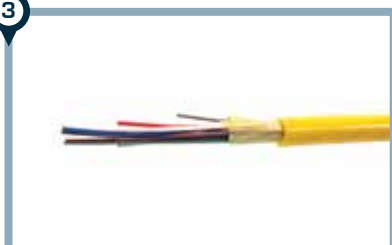
**MULTI-FIBER PRE-TERMINATED  
FIBER SOLUTION**

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6



3



**INDOOR DISTRIBUTION CABLE**

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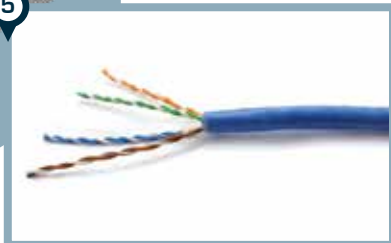
4



**RJ-45 FACEPLATES**

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5



**UTP CABLES**

P. 148

6



**WALLMOUNT CABINETS**

P. 114

# OUR NETWORK SOLUTIONS

1



**OPEN RACKS/VERTICAL CABLE MANAGERS**

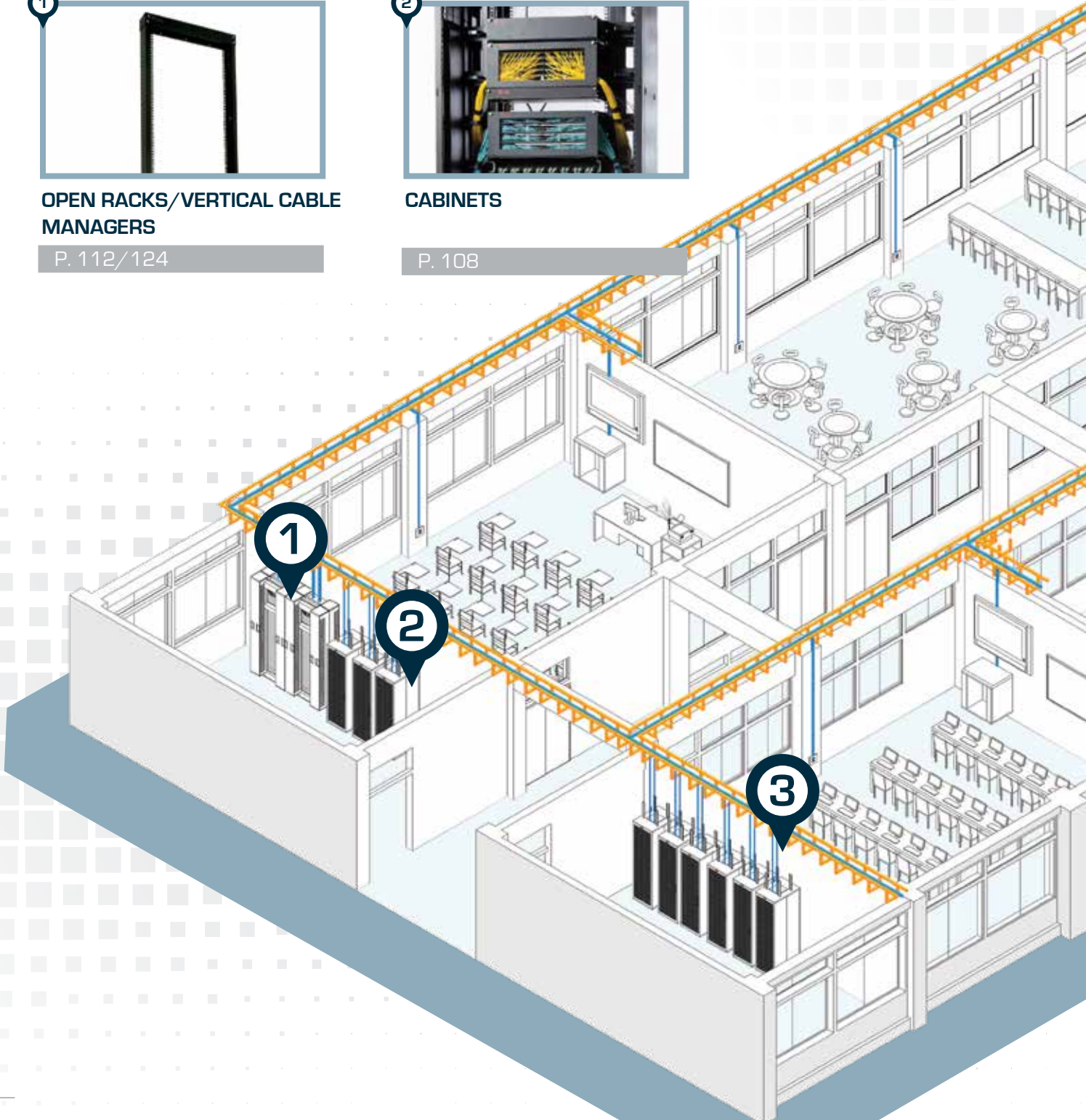
P. 112/124

2

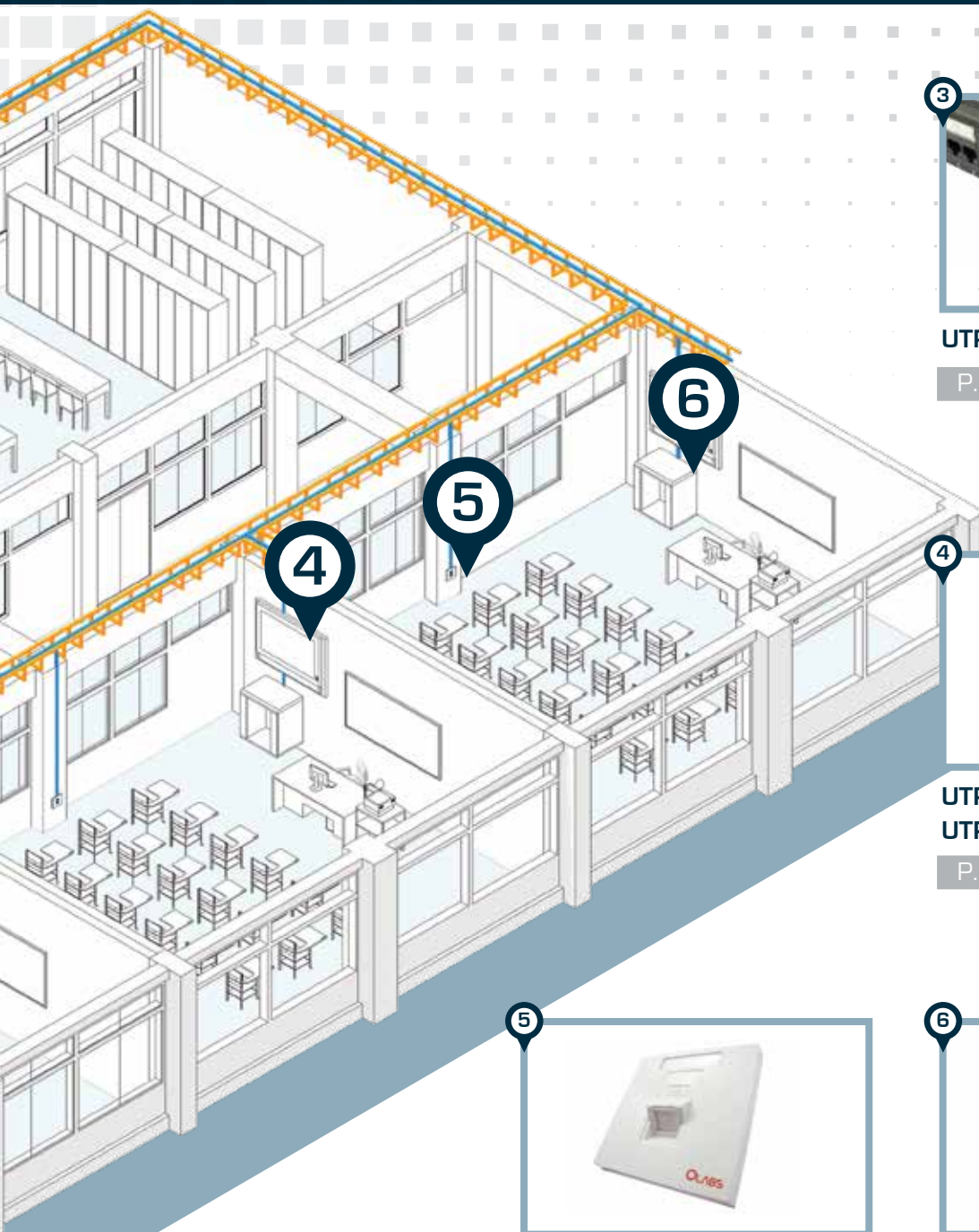


**CABINETS**

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# EDUCATION



**UTP PATCH PANELS**

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**UTP CABLES/  
UTP PATCHCORDS**

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**RJ-45 FACEPLATES**

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**WALLMOUNT CABINETS**

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# OUR NETWORK SOLUTIONS

1



**TACTICAL FIELD DEPLOYABLE FIBER SOLUTIONS**

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2



**IP68 MPO ASSEMBLIES**

P. 132

3



**IP68 LC ASSEMBLIES**

P. 134

4



**OUTDOOR IP WALLMOUNTS**

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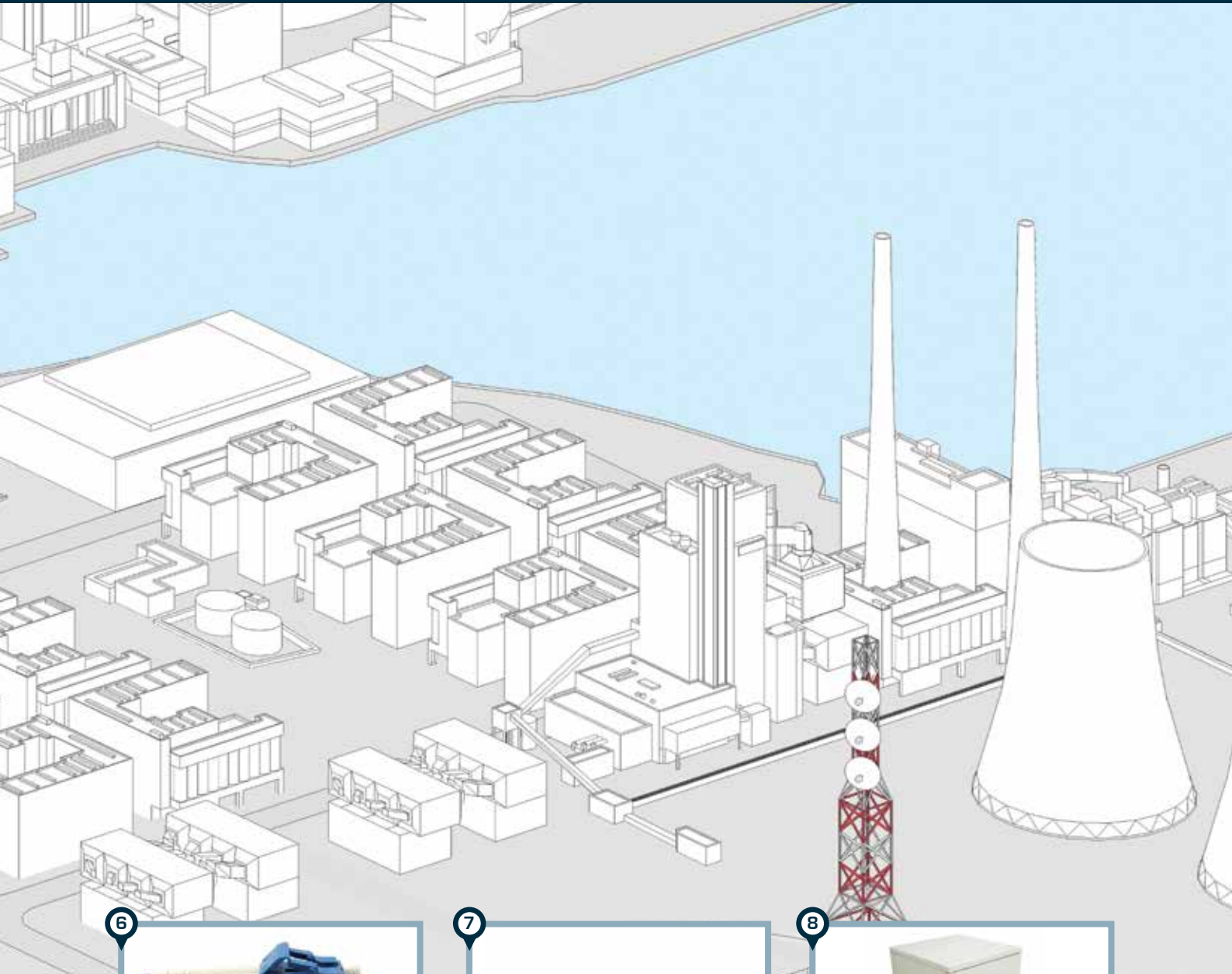
5



**STEEL ARMORED CABLE**

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# OUTDOOR AND HARSH ENVIRONMENTS



**ARMORED PATCHCORDS**

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**CENTRAL STRENGTH MEMBER ARMORED CABLE**

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**OUTDOOR CABINETS WITH AIR-CONDITIONING UNIT**

P. 138

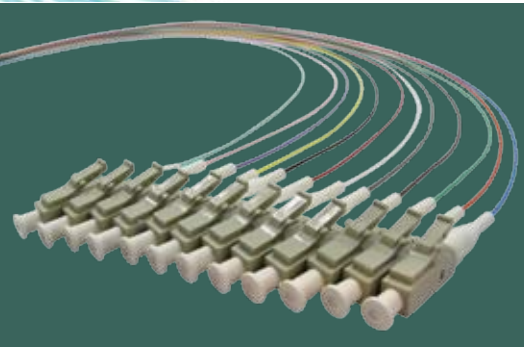
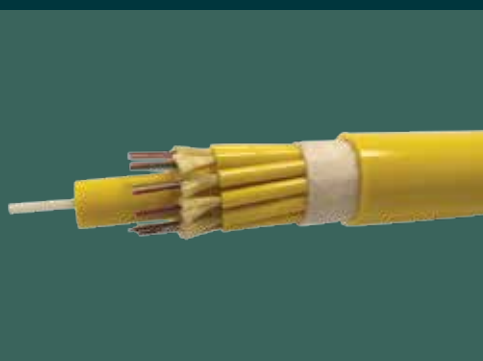
# FIBER CONNECTIVITY & RELATED COMPONENTS

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Olabs Fiber System **CREATES** the greatest users values: Flexibility, Practical, Accommodative

From product colorizations, functioning, to product design and performance, all Olabs products are made to exceed customer expectation while striking for the very best balance between cost and performances.

All products offered from the FiberFlex™ series are made to address the latest industrial requirements with the best usability in all parts of the networks with the concepts of flexibility, practical and accommodative.





## FIBER CONNECTIVITY

P.22 | Common Configurations

### FIBER OPTIC CABLES

P.26	Indoor Mini-core Cable
P.28	Indoor Distribution Cable
P.30	Outdoor Central Strength Member Armored Cable
P.31	Outdoor Steel Armored Cable

### PRE-TERMINATED FIBER CABLING

P.32	HD Series Patchcords
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P.42	Pigtails
P.46	Multi-fiber Pre-terminated Fiber Solution
P.49	MPO Trunk Assemblies
P.53	MPO Assemblies for 40G/100G

### LOOPBACK

P.58	MPO Loopback for 40G/100G
P.60	LC, SC Loopback Assemblies

### FIELD TERMINATION CONNECTOR

P.62	SC No Polish Connector
------	------------------------

### ATTENUATORS

P.64	Attenuators
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### FIBER OPTIC CLEANING KITS

P.65	Fiber Optic Cleaning Kits
------	---------------------------

# COMMON CONFIGURATIONS

Olabs fiber system is designed and offered by adopting the customer-driven approach. All standard range products offered from the FiberFlex™ series are made to address the latest industrial requirements with the best usability in all parts of the networks.

The standard specification of our Fiber System is described in detail on this page. On the other hand, we always bear in mind the concept of customer-driven approach and welcome for any customized requests. Please enquiry about our custom service when needed.

## FIBER SPECIFICATIONS

Fiber Type	OS1 / OS2	
ITU-T Standard	G.652D	
Fiber Core / Cladding Diameter (µm)	9/125	
Numerical Aperture	0.14	
WAVELENGTH (NM)	1310	1550
Max. Attenuation (dB/Km)	≤ 0.35	≤ 0.2
Overfill Launch Min. Bandwidth - OFL	-	-
Minimum Effective Modal - EMB (MHz · Km)	-	-
1G Transmission Distance (Meter)	5000	-
10G Transmission Distance (Meter)	10000	40000
40G/100G Transmission Distance (Meter)	-	-

## APPLICATIONS AND FIBER MODE

Fiber Mode	Applications	Typical Transimission Distance
<b>Singlemode</b> <b>OS1/OS2</b>	Campus and backbones cabling Carrier equipment Long-haul applications	5 kilometers
<b>Multimode</b> <b>OM1, OM2</b>	Building backbones and horizontal zoning Low-bandwidth or small to medium enterprise networks Short-haul applications	500 meters
<b>Multimode</b> <b>OM3</b>	LAN/SAN device to device 10G Ethernet applications Medium to large enterprise networks	300 meters for 10G
<b>Multimode</b> <b>OM4</b>	High performance computer clusters VCSEL based propagation 10G/40G/100G Ethernet applications	550 meters for 10G 150 meters for 40G/100G

# COMMON CONFIGURATIONS

OM1		OM2		OM3		OM4	
-		G651.1		G651.1		G651.1	
62.5/125		50/125		50/125		50/125	
0.275		0.20		0.20		0.20	
<b>850</b>	<b>1300</b>	<b>850</b>	<b>1300</b>	<b>850</b>	<b>1300</b>	<b>850</b>	<b>1300</b>
≤ 3.0	≤ 0.8	≤ 2.5	≤ 0.7	≤ 2.3	≤ 0.6	≤ 2.3	≤ 0.6
200	500	500	500	1500	500	3500	500
220	-	500	-	2000	-	3500	500
275	550	550	550	1000	600	1100	600
33	220 <sup>(1)</sup> / 300 <sup>(2)</sup>	82	220 <sup>(1)</sup> / 300 <sup>(2)</sup>	300	300	550	300 <sup>(3)</sup>
-	-	-	-	100	-	150	-

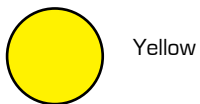
[1] Applies to 10GBASE-LRM transceivers  
 [2] Applies to 10GBASE-LX4 transceiver  
 [3] Applies to 10GBASE-LX4 (CWDM)

## STANDARD JACKET COLORS

Indoor Fiber Cables & Fiber Patchcords

Outdoor Fiber Cables  
Steel Armored Cables

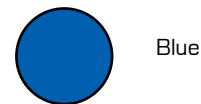
Outdoor Armored Patchcords



Yellow



Black



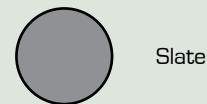
Blue



Orange



Black



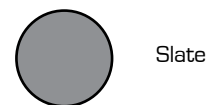
Slate



Aqua



Black



Slate



Aqua



Black



On request

# COMMON CONFIGURATIONS

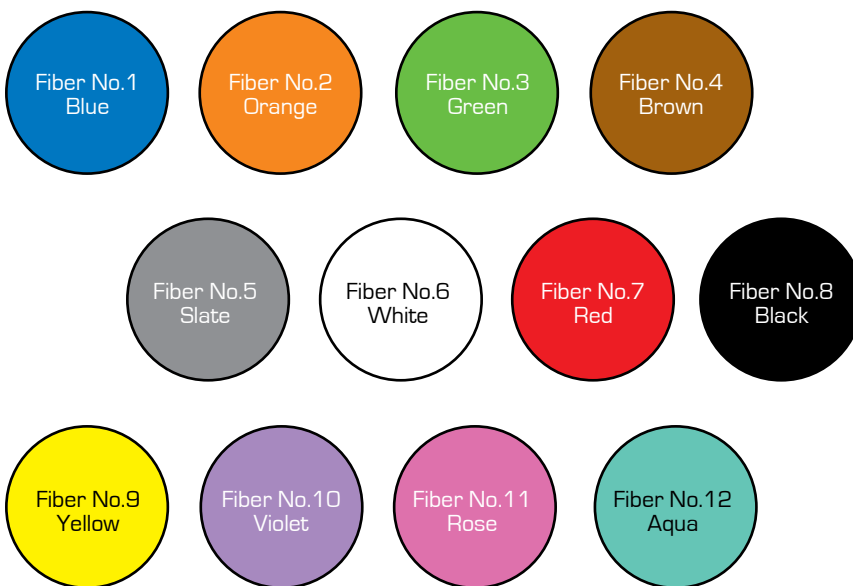
## STANDARD OFFERING FOR CABLE JACKET MATERIALS

Jacket Material	Abbreviation	Characteristics
Plenum	OFNP	<ul style="list-style-type: none"> <li>Suitable for plenum areas installation (the space between a ceiling and the floor above it)</li> <li>Delivers the highest fire retardant rating</li> <li>Emits little smoke during combustion</li> </ul>
Riser	OFNR	<ul style="list-style-type: none"> <li>Used for riser applications (the cable paths between floors in a building)</li> <li>Prevent fire from spreading between floors during combustion</li> <li>Normally used in a vertical zone of space</li> </ul>
Low Smoke Zero Halogen	LSZH	<ul style="list-style-type: none"> <li>Emits a reduced amount of smoke during combustion</li> <li>Produces zero halogen</li> <li>Prevent toxic or corrosive combustion gases in the case of fire</li> </ul>

## FIBER COLOR CODES TIA/EIA-598

Olabs fiber system is made in compliance to TIA/EIA-598 color coding. Inside the fiber cable or inside each tube in a loose tube fiber cable, individual fibers will be color coded for identification.

For splicing, the same color fibers are spliced to ensure continuity of color codes throughout a cable run.



# COMMON CONFIGURATIONS

## OPTICAL PERFORMANCE ON FIBER CABLE ASSEMBLIES

### Single-fiber Connectors with ceramic ferrules: FC, SC, ST, LC

Fiber Mode	Endface Polishing	Insertion Loss	Return Loss
Singlemode	UPC	≤ 0.3dB (Typical 0.15dB)	≥ 50dB
	APC <sup>(1)</sup>	≤ 0.3dB (Typical 0.15dB)	≥ 60dB
Multimode	PC	≤ 0.3dB (Typical 0.2dB)	≥ 23dB

(1) APC polishing refers to cone ferrule 8-degree angled polishing

### Multi-fiber Connectors with plastic ferrules: MPO

Fiber Mode	Ferrule Types <sup>(2)</sup>	Insertion Loss	Return Loss
Singlemode	Low Loss	≤ 0.35dB	≥ 55dB
	Standard	≤ 0.75dB	≥ 50dB
Multimode	Low Loss 50/125	≤ 0.35dB	≥ 25dB
	Low Loss 62.5/125	≤ 0.35dB	≥ 20dB
	Standard 50/125	≤ 0.6dB	≥ 25dB
	Standard 62.5/125	≤ 0.6dB	≥ 20dB

(2) Part Nos. in this section refers to "Standard" MPO, please contact sales team when "Low Loss" MPO is required.

## LENGTH TOLERANCE FOR FIBER CABLE ASSEMBLIES

### Length Tolerance

Length	Tolerance
≤ 3m	+ 150 mm / - 0
30m ≥ L > 3m	+ 300 mm / - 0
> 30m	+ 1% / - 0

# INDOOR MINI-CORE CABLE

Mini-core cable constructed of multiple color-coded 250µm primary coating fibers, surrounded by aramid yarn strength members and packaged in a cable jacket with minimal diameter.



## KEY FEATURES :

- Suitable for any indoor cabling applications
- All dry loose tube 250µm primary coating fiber especially suitable for MPO terminations
- Offered in 12- to 144-Fiber
- Available in singlemode (OS1/OS2), and multimode (OM1, OM2, OM3, OM4)
- Choices of Riser (OFNR), Low Smoke Zero Halogen (LSZH) and Plenum (OFNP) cable jacket
- Support installation environments that require high density, high flexibility and small bend radius
- Compact in size and light in weight for easy installation

## Specifications

<b>Available Fiber Counts</b>	12-, 24-, 48-, 72-, 96-, 144-Fiber
<b>Available Fiber Modes</b>	Singlemode (OS1/OS2) Multimode (OM1, OM2, OM3, OM4)
<b>Fiber Characteristic</b>	Primary Coating : 250µm (245 +/- 10µm) Primary Coating Color : 12-color Compliant to TIA-598
<b>Outer Jacket Colors</b>	Yellow - Singlemode (OS 1/2) Orange - Multimode (OM1, OM2) Aqua - Multimode (OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH) Plenum (OFNP)
<b>Temperature Range</b>	Storage or Transportation : - 20°C to + 70°C Operation : - 20°C to + 70°C

## Mechanical Charateristics

Parameters	Fiber	Fiber Count					
		12-Fiber	24-Fiber	48-Fiber	72-Fiber	96-Fiber	144-Fiber
<b>Outer Diameter (mm)</b>		3.0	9.0	9.0	11.2	13.5	17.5
<b>No. of Sub-unit</b>		N/A	N/A	4	6	8	12
<b>Nominal Weight (Kg/Km)</b>		7.8	72	79	126	178	285
<b>Max. Tension (N)</b>							
<b>Short-term</b>		150	300	600	1000	1000	1000
<b>Long-term</b>		80	160	200	300	300	300
<b>Max. Crushing Resistance (N/100)</b>							
<b>Short-term</b>		500	1000	1000	1000	1000	1000
<b>Long-term</b>		150	300	300	300	300	300
<b>Min. Bending Radius (mm)</b>							
<b>Dynamic</b>		30D	30D	30D	30D	30D	30D
<b>Static</b>		15D	15D	15D	15D	15D	15D

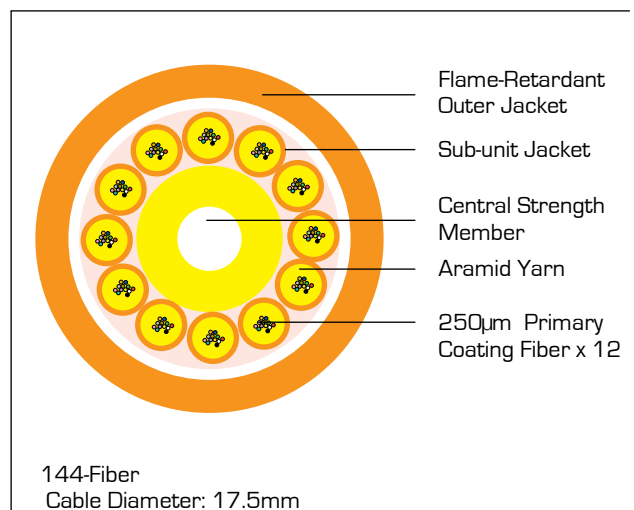
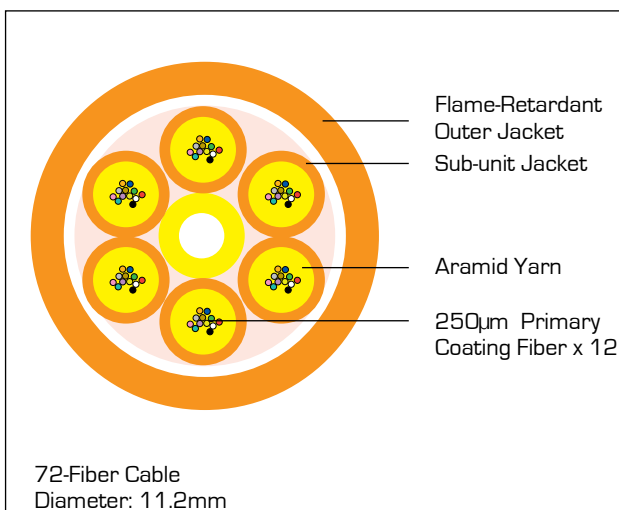
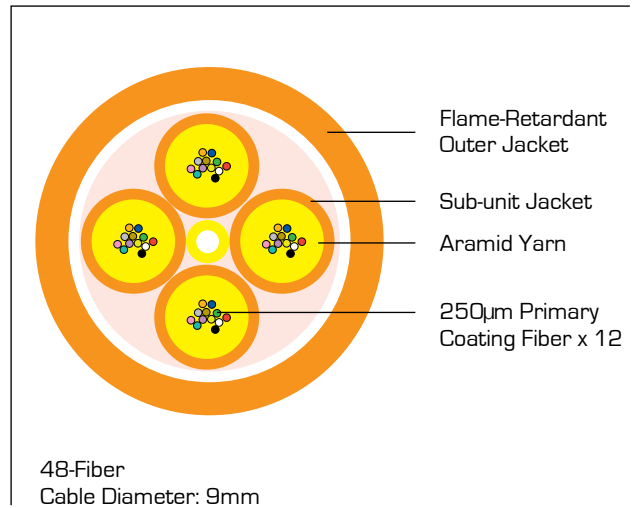
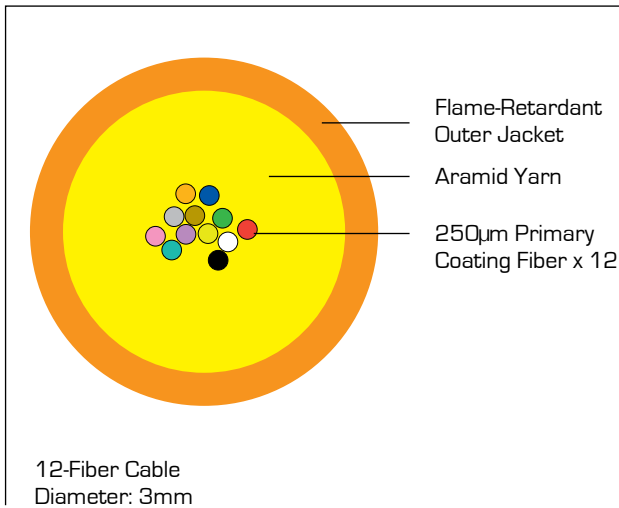


# INDOOR MINI-CORE CABLE

FiberFlex™ Mini-core Cable		Part No. with 3 Cable Jacket Options <sup>(1)</sup>		
Item Description		OFNR Jacket	LSZH Jacket	OFNP Jacket
Fiber Count	Fiber Mode			
xxx-Fiber	SM	FC02-xxxS1R	FC02-xxxS1L	FC02-xxxS1P
xxx-Fiber	OM1	FC02-xxxM1R	FC02-xxxM1L	FC02-xxxM1P
xxx-Fiber	OM2	FC02-xxxM2R	FC02-xxxM2L	FC02-xxxM2P
xxx-Fiber	OM3	FC02-xxxM3R	FC02-xxxM3L	FC02-xxxM3P
xxx-Fiber	OM4	FC02-xxxM4R	FC02-xxxM4L	FC02-xxxM4P

[1] "xxx" refers to nos. of fiber count, options available are "012", "024", "048", "072", "096", "144".

## CABLE CROSS SECTION ILLUSTRATION



# INDOOR DISTRIBUTION CABLE

Distribution cables constructed of multiple 900µm tight-buffered fibers surrounded by aramid yarn strength members, with flexible sub-unit tubes to provide appropriate fiber protection and to simplify fiber identification.



## KEY FEATURES :

- Suitable for any indoor applications
- 900µm tight-buffered coating fiber with flexible sub-units
- Offered in 4- to 144-Fiber
- Choices of Riser (OFNR), Low Smoke Zero Halogen (LSZH) and Plenum (OFNP) cable jacket
- Buffered fibers and sub-units are organized in accordance with TIA standard for easy identification
- Provides good fiber protection while maintaining superior cable bending flexibility

## Specifications

<b>Available Fiber Counts</b>	4-, 6-, 8-, 12-, 16-, 24-, 48-, 72-, 96-, 144-Fiber
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Fiber Characteristic</b>	Primary Coating : 250µm (245 +/- 10µm) Buffered Layer : 900µm (870 +/- 50µm) Buffer Color : 12-color Compliant to TIA-598
<b>Outer Jacket Colors</b>	Yellow - Singlemode (OS 1/2) Orange - Multimode (OM1, OM2) Aqua - Multimode (OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH) Plenum (OFNP)
<b>Temperature Range</b>	Storage or transportation : - 20°C to + 70°C Operation : - 20°C to + 70°C

## Mechanical Characteristics

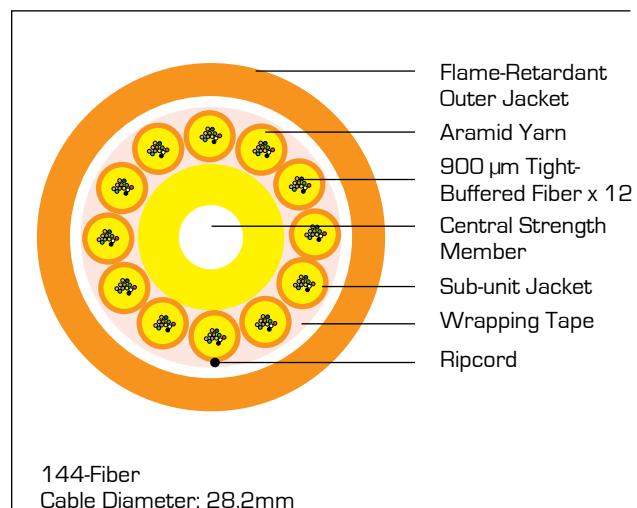
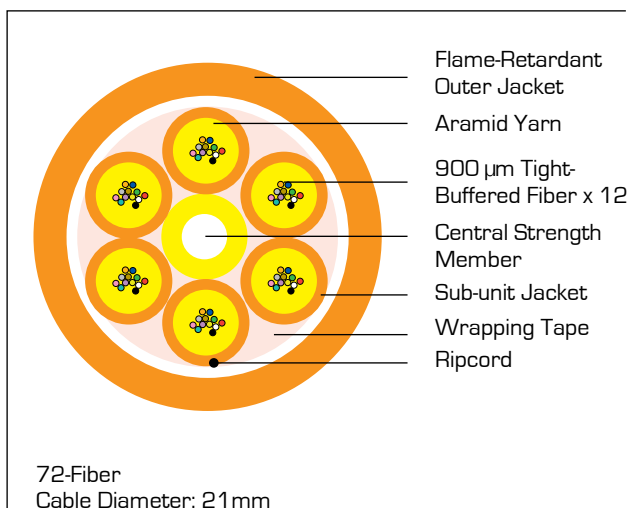
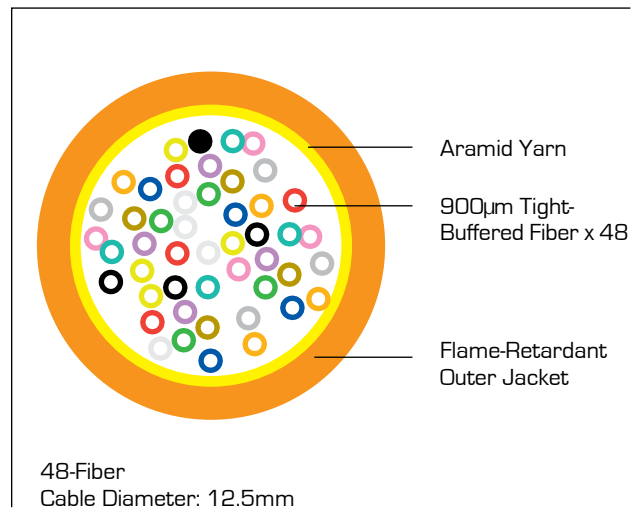
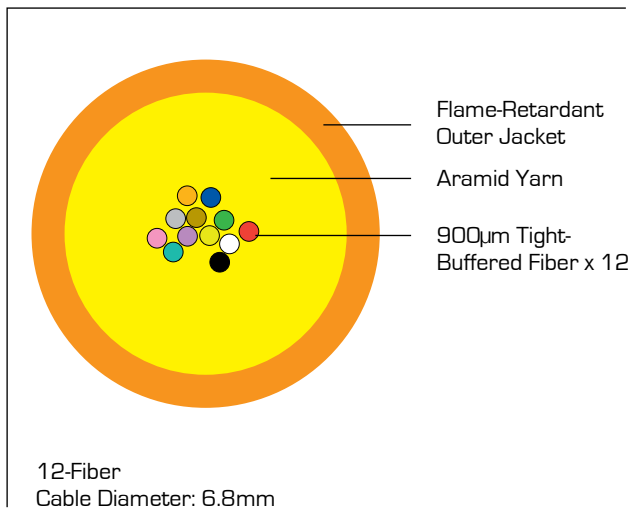
Parameters	Fiber	Fiber Count									
		4-Fiber	6-Fiber	8-Fiber	12-Fiber	16-Fiber	24-Fiber	48-Fiber	72-Fiber	96-Fiber	144-Fiber
<b>Outer Diameter (mm)</b>		4.8	5.2	6.2	6.8	7.4	8.4	12.5	21.0	25.8	28.2
<b>No. of Sub-unit</b>		N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	8	12
<b>Nominal Weight (Kg/km)</b>		18	23	29	37	48	61	132	328	500	678
<b>Max. Tension (N)</b>											
<b>Short-term</b>		270	330	480	600	660	720	1200	2500	3000	4000
<b>Long-term</b>		90	110	160	200	220	240	520	1000	1200	1600
<b>Max. Crushing Resistance (N/100)</b>											
<b>Short-term</b>		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>Long-term</b>		300	300	300	300	300	300	300	300	300	300
<b>Min. Bending Radius (mm)</b>											
<b>Dynamic</b>		20D	20D	20D	20D	20D	20D	20D	20D	20D	20D
<b>Static</b>		10D	10D	10D	10D	10D	10D	10D	10D	10D	10D

# INDOOR DISTRIBUTION CABLE

FiberFlex™ Distribution Cable		Part No. with 3 Cable Jacket Options <sup>(1)</sup>		
Item Description		OFNR Jacket	LSZH Jacket	OFNP Jacket
Fiber Count	Fiber Mode			
xxx-Fiber	SM	FC01-xxxS1R	FC01-xxxS1L	FC01-xxxS1P
xxx-Fiber	OM1	FC01-xxxM1R	FC01-xxxM1L	FC01-xxxM1P
xxx-Fiber	OM2	FC01-xxxM2R	FC01-xxxM2L	FC01-xxxM2P
xxx-Fiber	OM3	FC01-xxxM3R	FC01-xxxM3L	FC01-xxxM3P
xxx-Fiber	OM4	FC01-xxxM4R	FC01-xxxM4L	FC01-xxxM4P

[1] "xxx" refers to nos. of fiber count, options available are "004", "006", "008", "012", "016", "024", "048", "072", "096", "144".

## CABLE CROSS SECTION ILLUSTRATION



# OUTDOOR CENTRAL STRENGTH MEMBER ARMORED CABLE

Armored fiber optic cable in stranded loose tube structure which withstands high tensile stresses and provides protections from rodents.

Offered in 2- to 144-Fiber count, available in singlemode (OS1/OS2) and multimode (OM1, OM2, OM3, OM4) with LSZH or PE jacket.



## KEY FEATURES :

- Suitable for all outdoor and harsh environment applications
- Extra thickness on outer jacket withstand strong pressure and tensile stresses
- Corrugated steel tape design offers extra mechanical and rodent protection
- Wide range of fiber count options from 2- to 144-Fiber
- Loose tube design provides outstanding optical fiber protection

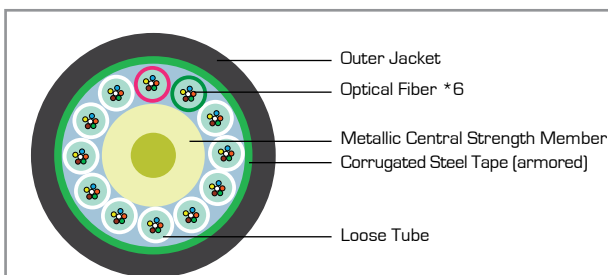
## Specifications

Available Fiber Counts	2-, 4-, 6-, 8-, 12-, 24-, 48-, 72-, 96-, 144-Fiber
Available Fiber Modes	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
Jacket Material Options	Polyethylene (PE) Low Smoke Zero Halogen (LSZH)
Material of Central Strength Member	Steel
Temperature Range	Storage or Transportation : - 40°C to + 70°C Operation : - 40°C to + 70°C

## Specifications - Mechanical Parameters

	Fiber Count			
	2~48-Fiber	72-Fiber	96-Fiber	144-Fiber
Outer Diameter (mm)	10.5 ± 0.5	11.5 ± 0.5	13.0 ± 0.5	15.8 ± 0.5
No. of Tube per Cable	5	6	8	12
Nominal Weight (Kg/Km)	160	199	238	295
Max. Tension (N)	Short-term	1500	3000	3000
	Long-term	600	1000	1000
Max. Crushing	Short-term	1000	1000	1000
	Long-term	300	300	300

## CABLE CROSS SECTION DIAGRAM



Example of 72-Fiber Central Strength Member Armored Cable, OS1/2, LSZH  
P/N: FC07-072S1L

## Central Strength Member Armored Cable

Fiber Mode	Part No. <sup>(1)</sup>	
	PE Jacket	LSZH Jacket
SM	FC07-xxxS1E	FC07-xxxS1L
OM1	FC07-xxxM1E	FC07-xxxM1L
OM2	FC07-xxxM2E	FC07-xxxM2L
OM3	FC07-xxxM3E	FC07-xxxM3L
OM4	FC07-xxxM4E	FC07-xxxM4L

(1) "xxx" refers to nos. of fiber count, options available are "002", "004", "006", "008", "012", "024", "048", "072", "096", "144".

# OUTDOOR STEEL ARMORED CABLE

Featuring two steel strength members with corrugated steel tape, the steel armored cable is offered with options of 2- to 24-Fiber in either PE or LSZH jacket.

Fiber choices of singlemode (OS1/OS2), and multimode (OM1, OM2, OM3, OM4) to fit for different installations.



## KEY FEATURES :

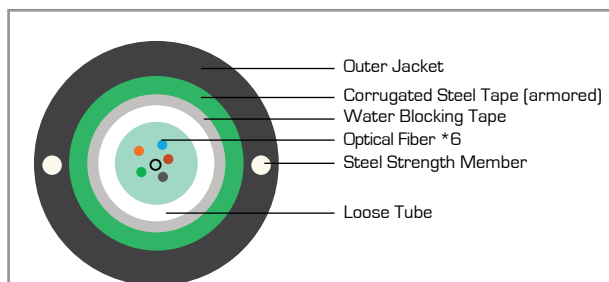
- Suitable for cable deployment in aerial and duct areas
- 2 ruggedized steel wires for self-support function
- Water blocking tape provides added ingress protection
- Corrugated steel tape delivers superior crush and rodent resistant
- Small diameter, light weight for easy laying
- Excellent durability and long service life

## Specifications

Available Fiber Counts	2-, 4-, 6-, 8-, 12-, 24-Fiber
Available Fiber Mode	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
Jacket Material Options	Polyethylene (PE) Low Smoke Zero Halogen (LSZH)
Material of Two Strength Member	Steel
Temperature Range	Storage or Transportation : - 40°C to + 70°C Operation : - 40°C to + 70°C

Specifications - Mechanical Parameters		Fiber Count	
		2 ~ 12-Fiber	24-Fiber
Outer Diameter (mm)		8.0 ± 0.3	8.8 ± 0.3
Nominal Weight (Kg/Km)	LSZH Jacket	85	105
	PE Jacket	62	74
Max. Tension (N)	Short-term	1500	1500
	Long-term	500	500
Max. Crushing Resistance (N/100)	Short-term	3000	3000
	Long-term	1000	1000

## CABLE CROSS SECTION DIAGRAM



Example of 6-Fiber Steel Armored Cable, OM1, LSZH  
P/N: FC06-006M1L

Steel Armored Cable		
Fiber Mode	Part No. <sup>(1)</sup>	
	PE Jacket	LSZH Jacket
SM	FC06-xxxS1E	FC06-xxxS1L
OM1	FC06-xxxM1E	FC06-xxxM1L
OM2	FC06-xxxM2E	FC06-xxxM2L
OM3	FC06-xxxM3E	FC06-xxxM3L
OM4	FC06-xxxM4E	FC06-xxxM4L

<sup>(1)</sup> "xxx" refers to nos. of fiber count, options available are "002", "004", "006", "008", "012", "024".

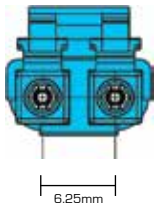
# HD SERIES PATCHCORDS

## MINI-LC PATCHCORD

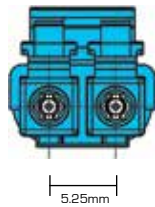


### KEY FEATURES :

- Minimized physical center pitch from 6.25mm to 5.25mm
- Minimized physical footprint without any compromise on performance compare to standard LC patchcords
- Reduced footprint saving space and increase energy efficiency
- Minimizing cable's impact on air flow
- Increase port density by reduced footprint on Duplex LC patch



Standard LC Connector  
Front View



Mini-LC Connector  
Front View

### Specifications

<b>Patchcord Structure</b>	Duplex Patchcord (2-Fiber)
<b>Cable Type</b>	2mm Zipcord
<b>Cable Jacket Colors</b>	Yellow - Singlemode (OS 1/2) Orange - Multimode (OM1, OM2) Aqua - Multimode (OM3, OM4)
<b>Connector Type</b>	Mini-LC
<b>Endface Polishing Options</b>	APC/UPC/PC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Cable Jacket Material</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH) Plenum (OFNP) on request, please contact our sales team for details



Item Description				Part No. <sup>(1), (2)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
Mini-LC	Mini-LC	OS1/2	APC	PCD8A8AS1DR-xxxM	PCD8A8AS1DL-xxxM
Mini-LC	Mini-LC	OS1/2	UPC	PCD8U8US1DR-xxxM	PCD8U8US1DL-xxxM
Mini-LC	Mini-LC	OM3	PC	PCD8P8PM3DR-xxxM	PCD8P8PM3DL-xxxM
Mini-LC	Mini-LC	OM4	PC	PCD8P8PM4DR-xxxM	PCD8P8PM4DL-xxxM

1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits from "001" to "999"  
2) Please specify if you need different connector type on B-End Connector

# HD SERIES PATCHCORDS

## LC-UNIBOOT PATCHCORD



### KEY FEATURES :

- LC duplex patchcord with unified connector housing and single boot
- Connector could be mounted closer to the faceplate compare to standard LC
- Use of Round Duplex cable that is compact in size
- Reduced nos. of cables to half for dramatically save spaces



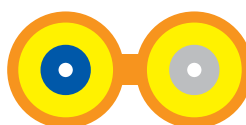
- Use of unified connector housing and Round Duplex Cable
- Dramatically save space and reduced numbers of cables required

#### ■ LC-Uniboot Patchcords using Round Duplex Cable



Cable size =  $\varnothing 3\text{mm}$   
Space required for installing 2-Fiber channels =  $3\text{mm} \times 1$

#### ■ Normal LC Patchcords using Duplex Zipcord Cable



Cable size =  $3 \times 6\text{mm}$   
Space required for installing 2-Fiber channels = 2 times as of LC-Uniboot

## Specifications

<b>Patchcord Structure</b>	Duplex Patchcord (2-Fiber)
<b>Cable Type</b>	Round Duplex Cable
<b>Connector Type</b>	LC-Uniboot
<b>Endface Polish Options</b>	APC/UPC/PC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Cable Jacket Material</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH) Plenum (OFNP) on request, please contact our sales team for details



Item Description				Part No. <sup>(1), (2)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
LC-Uniboot	LC-Uniboot	OS1/2	APC	PCD9A9AS1GR-xxxM	PCD9A9AS1GL-xxxM
LC-Uniboot	LC-Uniboot	OS1/2	UPC	PCD9U9US1GR-xxxM	PCD9U9US1GL-xxxM
LC-Uniboot	LC-Uniboot	OM3	PC	PCD9P9PM3GR-xxxM	PCD9P9PM3GL-xxxM
LC-Uniboot	LC-Uniboot	OM4	PC	PCD9P9PM4GR-xxxM	PCD9P9PM4GL-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits from "001" to "999"  
[2] Please specify if you need different connector type on B-End Connector

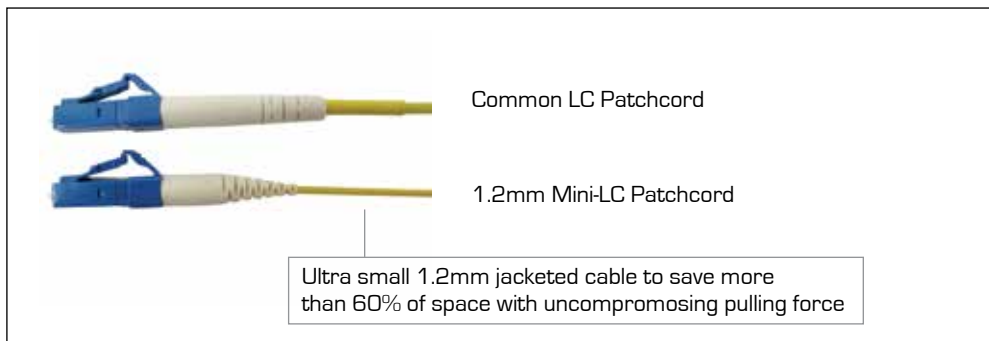
# HD SERIES PATCHCORDS

## LC PATCHCORD WITH MINI 1.2MM CABLE ASSEMBLY



### KEY FEATURES :

- Ultra small 1.2mm jacketed cable assemblies
- Terminated by 1.2mm jacketed cable with Kelvar for promising pulling strength
- Save more than 60% of space than using common 2.0mm cable patchcords
- Uncompromising pulling force in comparison with 2.0mm cable patchcords



### Specifications

<b>Patchcord Structure</b>	Simplex Patchcord
<b>Cable Type</b>	1.2mm Jacketed Cable with Kevlar inside
<b>Connector Types</b>	LC (Options available for FC, ST and SC)
<b>Endface Polish Options</b>	APC/UPC/PC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH)



Item Description				Part No. <sup>(1), (2), (3)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
LC	LC	OS1/2	APC	PCS4A4AS1HR-xxxM	PCS4A4AS1HL-xxxM
LC	LC	OS1/2	UPC	PCS4U4US1HR-xxxM	PCS4U4US1HL-xxxM
LC	LC	OM3	PC	PCS4P4PM3HR-xxxM	PCS4P4PM3HL-xxxM
LC	LC	OM4	PC	PCS4P4PM4HR-xxxM	PCS4P4PM4HL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits from "001" to "999"  
 (2) Please specify if you need different connector type on B-End Connector  
 (3) Please contact our sales team for FC, SC and ST options



# PATCHCORDS

Fiber optic cable that is connectorized at both ends for directly connected to equipment.

Make according to customer specified length and fiber mode, available for all connector choices including FC, SC, ST, LC, and E2000.

Every piece of products are tested to assure excellent optical performance with traceable data.



## KEY FEATURES :

- Applicable for all kinds of fiber optic networks
- Factory-tested assemblies with traceable test data
- Available for all connector choices in simplex or duplex structure
- Customized length fits different installation needs
- Save time and cost of on-site installation
- Superior optical performance
- Made to comply Telcordia GR-326-CORE

## Specifications

<b>Cable Structures</b>	Simplex Patchcord Duplex Patchcord
<b>Cable Types</b>	3mm Cable (for Simplex) 3mm Zipcord (for Duplex)
<b>Cable Jacket Colors</b>	Yellow - Singlemode (OS 1/2) Orange - Multimode (OM1, OM2) Aqua - Multimode (OM3, OM4)
<b>Connector Types</b>	FC/SC/ST/LC/E2000
<b>Endface Polish Options</b>	APC/UPC/ PC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH) Plenum (OFNP) on request, please contact our sales team for details

# PATCHCORDS

## SIMPLEX PATCHCORD



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	FC	OS1/2	Yellow	APC	PCS1A1AS1CR-xxxM	PCS1A1AS1CL-xxxM
FC	FC	OS1/2	Yellow	UPC	PCS1U1US1CR-xxxM	PCS1U1US1CL-xxxM
FC	FC	OM1	Orange	PC	PCS1P1PM1CR-xxxM	PCS1P1PM1CL-xxxM
FC	FC	OM2	Orange	PC	PCS1P1PM2CR-xxxM	PCS1P1PM2CL-xxxM
FC	FC	OM3	Aqua	PC	PCS1P1PM3CR-xxxM	PCS1P1PM3CL-xxxM
FC	FC	OM4	Aqua	PC	PCS1P1PM4CR-xxxM	PCS1P1PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	SC	OS1/2	Yellow	APC	PCS1A2AS1CR-xxxM	PCS1A2AS1CL-xxxM
FC	SC	OS1/2	Yellow	UPC	PCS1U2US1CR-xxxM	PCS1U2US1CL-xxxM
FC	SC	OM1	Orange	PC	PCS1P2PM1CR-xxxM	PCS1P2PM1CL-xxxM
FC	SC	OM2	Orange	PC	PCS1P2PM2CR-xxxM	PCS1P2PM2CL-xxxM
FC	SC	OM3	Aqua	PC	PCS1P2PM3CR-xxxM	PCS1P2PM3CL-xxxM
FC	SC	OM4	Aqua	PC	PCS1P2PM4CR-xxxM	PCS1P2PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	ST	OS1/2	Yellow	APC	PCS1A3AS1CR-xxxM	PCS1A3AS1CL-xxxM
FC	ST	OS1/2	Yellow	UPC	PCS1U3US1CR-xxxM	PCS1U3US1CL-xxxM
FC	ST	OM1	Orange	PC	PCS1P3PM1CR-xxxM	PCS1P3PM1CL-xxxM
FC	ST	OM2	Orange	PC	PCS1P3PM2CR-xxxM	PCS1P3PM2CL-xxxM
FC	ST	OM3	Aqua	PC	PCS1P3PM3CR-xxxM	PCS1P3PM3CL-xxxM
FC	ST	OM4	Aqua	PC	PCS1P3PM4CR-xxxM	PCS1P3PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	LC	OS1/2	Yellow	APC	PCS1A4AS1CR-xxxM	PCS1A4AS1CL-xxxM
FC	LC	OS1/2	Yellow	UPC	PCS1U4US1CR-xxxM	PCS1U4US1CL-xxxM
FC	LC	OM1	Orange	PC	PCS1P4PM1CR-xxxM	PCS1P4PM1CL-xxxM
FC	LC	OM2	Orange	PC	PCS1P4PM2CR-xxxM	PCS1P4PM2CL-xxxM
FC	LC	OM3	Aqua	PC	PCS1P4PM3CR-xxxM	PCS1P4PM3CL-xxxM
FC	LC	OM4	Aqua	PC	PCS1P4PM4CR-xxxM	PCS1P4PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# PATCHCORDS

## SIMPLEX PATCHCORD



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	ST	OS1/2	Yellow	APC	PCS3A3AS1CR-xxxM	PCS3A3AS1CL-xxxM
ST	ST	OS1/2	Yellow	UPC	PCS3U3US1CR-xxxM	PCS3U3US1CL-xxxM
ST	ST	OM1	Orange	PC	PCS3P3PM1CR-xxxM	PCS3P3PM1CL-xxxM
ST	ST	OM2	Orange	PC	PCS3P3PM2CR-xxxM	PCS3P3PM2CL-xxxM
ST	ST	OM3	Aqua	PC	PCS3P3PM3CR-xxxM	PCS3P3PM3CL-xxxM
ST	ST	OM4	Aqua	PC	PCS3P3PM4CR-xxxM	PCS3P3PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	SC	OS1/2	Yellow	APC	PCS3A2AS1CR-xxxM	PCS3A2AS1CL-xxxM
ST	SC	OS1/2	Yellow	UPC	PCS3U2US1CR-xxxM	PCS3U2US1CL-xxxM
ST	SC	OM1	Orange	PC	PCS3P2PM1CR-xxxM	PCS3P2PM1CL-xxxM
ST	SC	OM2	Orange	PC	PCS3P2PM2CR-xxxM	PCS3P2PM2CL-xxxM
ST	SC	OM3	Aqua	PC	PCS3P2PM3CR-xxxM	PCS3P2PM3CL-xxxM
ST	SC	OM4	Aqua	PC	PCS3P2PM4CR-xxxM	PCS3P2PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	LC	OS1/2	Yellow	APC	PCS3A4AS1CR-xxxM	PCS3A4AS1CL-xxxM
ST	LC	OS1/2	Yellow	UPC	PCS3U4US1CR-xxxM	PCS3U4US1CL-xxxM
ST	LC	OM1	Orange	PC	PCS3P4PM1CR-xxxM	PCS3P4PM1CL-xxxM
ST	LC	OM2	Orange	PC	PCS3P4PM2CR-xxxM	PCS3P4PM2CL-xxxM
ST	LC	OM3	Aqua	PC	PCS3P4PM3CR-xxxM	PCS3P4PM3CL-xxxM
ST	LC	OM4	Aqua	PC	PCS3P4PM4CR-xxxM	PCS3P4PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
SC	SC	OS1/2	Yellow	APC	PCS2A2AS1CR-xxxM	PCS2A2AS1CL-xxxM
SC	SC	OS1/2	Yellow	UPC	PCS2U2US1CR-xxxM	PCS2U2US1CL-xxxM
SC	SC	OM1	Orange	PC	PCS2P2PM1CR-xxxM	PCS2P2PM1CL-xxxM
SC	SC	OM2	Orange	PC	PCS2P2PM2CR-xxxM	PCS2P2PM2CL-xxxM
SC	SC	OM3	Aqua	PC	PCS2P2PM3CR-xxxM	PCS2P2PM3CL-xxxM
SC	SC	OM4	Aqua	PC	PCS2P2PM4CR-xxxM	PCS2P2PM4CL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# PATCHCORDS

## SIMPLEX PATCHCORD



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
SC	LC	OS1/2	Yellow	APC	PCS2A4AS1CR-xxxM	PCS2A4AS1CL-xxxM
SC	LC	OS1/2	Yellow	UPC	PCS2U4US1CR-xxxM	PCS2U4US1CL-xxxM
SC	LC	OM1	Orange	PC	PCS2P4PM1CR-xxxM	PCS2P4PM1CL-xxxM
SC	LC	OM2	Orange	PC	PCS2P4PM2CR-xxxM	PCS2P4PM2CL-xxxM
SC	LC	OM3	Aqua	PC	PCS2P4PM3CR-xxxM	PCS2P4PM3CL-xxxM
SC	LC	OM4	Aqua	PC	PCS2P4PM4CR-xxxM	PCS2P4PM4CL-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
LC	LC	OS1/2	Yellow	APC	PCS4A4AS1CR-xxxM	PCS4A4AS1CL-xxxM
LC	LC	OS1/2	Yellow	UPC	PCS4U4US1CR-xxxM	PCS4U4US1CL-xxxM
LC	LC	OM1	Orange	PC	PCS4P4PM1CR-xxxM	PCS4P4PM1CL-xxxM
LC	LC	OM2	Orange	PC	PCS4P4PM2CR-xxxM	PCS4P4PM2CL-xxxM
LC	LC	OM3	Aqua	PC	PCS4P4PM3CR-xxxM	PCS4P4PM3CL-xxxM
LC	LC	OM4	Aqua	PC	PCS4P4PM4CR-xxxM	PCS4P4PM4CL-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
E2000	E2000	OS1/2	Yellow	APC	PCS5A5AS1CR-xxxM	PCS5A5AS1CL-xxxM
E2000	E2000	OS1/2	Yellow	UPC	PCS5U5US1CR-xxxM	PCS5U5US1CL-xxxM
E2000	E2000	OM1	Orange	PC	PCS5P5PM1CR-xxxM	PCS5P5PM1CL-xxxM
E2000	E2000	OM2	Orange	PC	PCS5P5PM2CR-xxxM	PCS5P5PM2CL-xxxM
E2000	E2000	OM3	Aqua	PC	PCS5P5PM3CR-xxxM	PCS5P5PM3CL-xxxM
E2000	E2000	OM4	Aqua	PC	PCS5P5PM4CR-xxxM	PCS5P5PM4CL-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# PATCHCORDS

## DUPLEX PATCHCORD



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	FC	OS1/2	Yellow	APC	PCD1A1AS1ER-xxxM	PCD1A1AS1EL-xxxM
FC	FC	OS1/2	Yellow	UPC	PCD1U1US1ER-xxxM	PCD1U1US1EL-xxxM
FC	FC	OM1	Orange	PC	PCD1P1PM1ER-xxxM	PCD1P1PM1EL-xxxM
FC	FC	OM2	Orange	PC	PCD1P1PM2ER-xxxM	PCD1P1PM2EL-xxxM
FC	FC	OM3	Aqua	PC	PCD1P1PM3ER-xxxM	PCD1P1PM3EL-xxxM
FC	FC	OM4	Aqua	PC	PCD1P1PM4ER-xxxM	PCD1P1PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	SC	OS1/2	Yellow	APC	PCD1A2AS1ER-xxxM	PCD1A2AS1EL-xxxM
FC	SC	OS1/2	Yellow	UPC	PCD1U2US1ER-xxxM	PCD1U2US1EL-xxxM
FC	SC	OM1	Orange	PC	PCD1P2PM1ER-xxxM	PCD1P2PM1EL-xxxM
FC	SC	OM2	Orange	PC	PCD1P2PM2ER-xxxM	PCD1P2PM2EL-xxxM
FC	SC	OM3	Aqua	PC	PCD1P2PM3ER-xxxM	PCD1P2PM3EL-xxxM
FC	SC	OM4	Aqua	PC	PCD1P2PM4ER-xxxM	PCD1P2PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	ST	OS1/2	Yellow	APC	PCD1A3AS1ER-xxxM	PCD1A3AS1EL-xxxM
FC	ST	OS1/2	Yellow	UPC	PCD1U3US1ER-xxxM	PCD1U3US1EL-xxxM
FC	ST	OM1	Orange	PC	PCD1P3PM1ER-xxxM	PCD1P3PM1EL-xxxM
FC	ST	OM2	Orange	PC	PCD1P3PM2ER-xxxM	PCD1P3PM2EL-xxxM
FC	ST	OM3	Aqua	PC	PCD1P3PM3ER-xxxM	PCD1P3PM3EL-xxxM
FC	ST	OM4	Aqua	PC	PCD1P3PM4ER-xxxM	PCD1P3PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	LC	OS1/2	Yellow	APC	PCD1A4AS1ER-xxxM	PCD1A4AS1EL-xxxM
FC	LC	OS1/2	Yellow	UPC	PCD1U4US1ER-xxxM	PCD1U4US1EL-xxxM
FC	LC	OM1	Orange	PC	PCD1P4PM1ER-xxxM	PCD1P4PM1EL-xxxM
FC	LC	OM2	Orange	PC	PCD1P4PM2ER-xxxM	PCD1P4PM2EL-xxxM
FC	LC	OM3	Aqua	PC	PCD1P4PM3ER-xxxM	PCD1P4PM3EL-xxxM
FC	LC	OM4	Aqua	PC	PCD1P4PM4ER-xxxM	PCD1P4PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# PATCHCORDS

## DUPLIX PATCHCORD



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	ST	OS1/2	Yellow	APC	PCD3A3AS1ER-xxxM	PCD3A3AS1EL-xxxM
ST	ST	OS1/2	Yellow	UPC	PCD3U3US1ER-xxxM	PCD3U3US1EL-xxxM
ST	ST	OM1	Orange	PC	PCD3P3PM1ER-xxxM	PCD3P3PM1EL-xxxM
ST	ST	OM2	Orange	PC	PCD3P3PM2ER-xxxM	PCD3P3PM2EL-xxxM
ST	ST	OM3	Aqua	PC	PCD3P3PM3ER-xxxM	PCD3P3PM3EL-xxxM
ST	ST	OM4	Aqua	PC	PCD3P3PM4ER-xxxM	PCD3P3PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	SC	OS1/2	Yellow	APC	PCD3A2AS1ER-xxxM	PCD3A2AS1EL-xxxM
ST	SC	OS1/2	Yellow	UPC	PCD3U2US1ER-xxxM	PCD3U2US1EL-xxxM
ST	SC	OM1	Orange	PC	PCD3P2PM1ER-xxxM	PCD3P2PM1EL-xxxM
ST	SC	OM2	Orange	PC	PCD3P2PM2ER-xxxM	PCD3P2PM2EL-xxxM
ST	SC	OM3	Aqua	PC	PCD3P2PM3ER-xxxM	PCD3P2PM3EL-xxxM
ST	SC	OM4	Aqua	PC	PCD3P2PM4ER-xxxM	PCD3P2PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	LC	OS1/2	Yellow	APC	PCD3A4AS1ER-xxxM	PCD3A4AS1EL-xxxM
ST	LC	OS1/2	Yellow	UPC	PCD3U4US1ER-xxxM	PCD3U4US1EL-xxxM
ST	LC	OM1	Orange	PC	PCD3P4PM1ER-xxxM	PCD3P4PM1EL-xxxM
ST	LC	OM2	Orange	PC	PCD3P4PM2ER-xxxM	PCD3P4PM2EL-xxxM
ST	LC	OM3	Aqua	PC	PCD3P4PM3ER-xxxM	PCD3P4PM3EL-xxxM
ST	LC	OM4	Aqua	PC	PCD3P4PM4ER-xxxM	PCD3P4PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
SC	SC	OS1/2	Yellow	APC	PCD2A2AS1ER-xxxM	PCD2A2AS1EL-xxxM
SC	SC	OS1/2	Yellow	UPC	PCD2U2US1ER-xxxM	PCD2U2US1EL-xxxM
SC	SC	OM1	Orange	PC	PCD2P2PM1ER-xxxM	PCD2P2PM1EL-xxxM
SC	SC	OM2	Orange	PC	PCD2P2PM2ER-xxxM	PCD2P2PM2EL-xxxM
SC	SC	OM3	Aqua	PC	PCD2P2PM3ER-xxxM	PCD2P2PM3EL-xxxM
SC	SC	OM4	Aqua	PC	PCD2P2PM4ER-xxxM	PCD2P2PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# PATCHCORDS

## DUPLEX PATCHCORD



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
SC	LC	OS1/2	Yellow	APC	PCD2A4AS1ER-xxxM	PCD2A4AS1EL-xxxM
SC	LC	OS1/2	Yellow	UPC	PCD2U4US1ER-xxxM	PCD2U4US1EL-xxxM
SC	LC	OM1	Orange	PC	PCD2P4PM1ER-xxxM	PCD2P4PM1EL-xxxM
SC	LC	OM2	Orange	PC	PCD2P4PM2ER-xxxM	PCD2P4PM2EL-xxxM
SC	LC	OM3	Aqua	PC	PCD2P4PM3ER-xxxM	PCD2P4PM3EL-xxxM
SC	LC	OM4	Aqua	PC	PCD2P4PM4ER-xxxM	PCD2P4PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
LC	LC	OS1/2	Yellow	APC	PCD4A4AS1ER-xxxM	PCD4A4AS1EL-xxxM
LC	LC	OS1/2	Yellow	UPC	PCD4U4US1ER-xxxM	PCD4U4US1EL-xxxM
LC	LC	OM1	Orange	PC	PCD4P4PM1ER-xxxM	PCD4P4PM1EL-xxxM
LC	LC	OM2	Orange	PC	PCD4P4PM2ER-xxxM	PCD4P4PM2EL-xxxM
LC	LC	OM3	Aqua	PC	PCD4P4PM3ER-xxxM	PCD4P4PM3EL-xxxM
LC	LC	OM4	Aqua	PC	PCD4P4PM4ER-xxxM	PCD4P4PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description					Part No. <sup>(1)</sup>	
A-End Connector	B-End Connector	Fiber Mode	Jacket Color	Endface Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
E2000	E2000	OS1/2	Yellow	APC	PCD5A5AS1ER-xxxM	PCD5A5AS1EL-xxxM
E2000	E2000	OS1/2	Yellow	UPC	PCD5U5US1ER-xxxM	PCD5U5US1EL-xxxM
E2000	E2000	OM1	Orange	PC	PCD5P5PM1ER-xxxM	PCD5P5PM1EL-xxxM
E2000	E2000	OM2	Orange	PC	PCD5P5PM2ER-xxxM	PCD5P5PM2EL-xxxM
E2000	E2000	OM3	Aqua	PC	PCD5P5PM3ER-xxxM	PCD5P5PM3EL-xxxM
E2000	E2000	OM4	Aqua	PC	PCD5P5PM4ER-xxxM	PCD5P5PM4EL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



# PIGTAILS

Fiber optic cable assembly that is connectorized at one end with 900µm tight buffered simplex cable.

Make according to customer specified length and fiber mode, available for all connector choices including FC, SC, ST, LC and E2000.

Offered with the options of individual packed pigtails and 12-color pigtails set.



## KEY FEATURES :

- Applicable for all kinds of fiber optic networks
- 900µm tight buffered simplex cable terminated with specified connector type
- Factory-tested assemblies with traceable test data
- Save time and cost of on-site installation
- Superior optical performance
- Made to comply Telcordia GR-326-CORE

## Specifications

<b>Cable Structure</b>	Simplex Pigtail
<b>Cable Type</b>	900um Tight Buffered Cable
<b>Cable Buffered Colors</b>	Yellow - Singlemode (OS 1/2) Orange - Multimode (OM1, OM2) Aqua - Multimode (OM3, OM4)
<b>Connector Type Options</b>	FC/SC/ST/LC/E2000
<b>Endface Polish Options</b>	APC/UPC/PC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH)

## SIMPLEX PIGTIAL



Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	OS1/2	APC	PTS1AS1AR-xxxM	PTS1AS1AL-xxxM
FC	OS1/2	UPC	PTS1US1AR-xxxM	PTS1US1AL-xxxM
FC	OM1	PC	PTS1PM1AR-xxxM	PTS1PM1AL-xxxM
FC	OM2	PC	PTS1PM2AR-xxxM	PTS1PM2AL-xxxM
FC	OM3	PC	PTS1PM3AR-xxxM	PTS1PM3AL-xxxM
FC	OM4	PC	PTS1PM4AR-xxxM	PTS1PM4AL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits



# PIGTAILS

## SIMPLEX PIGTAIL



Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
SC	OS1/2	APC	PTS2AS1AR-xxxM	PTS2AS1AL-xxxM
SC	OS1/2	UPC	PTS2US1AR-xxxM	PTS2US1AL-xxxM
SC	OM1	PC	PTS2PM1AR-xxxM	PTS2PM1AL-xxxM
SC	OM2	PC	PTS2PM2AR-xxxM	PTS2PM2AL-xxxM
SC	OM3	PC	PTS2PM3AR-xxxM	PTS2PM3AL-xxxM
SC	OM4	PC	PTS2PM4AR-xxxM	PTS2PM4AL-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	OS1/2	APC	PTS3AS1AR-xxxM	PTS3AS1AL-xxxM
ST	OS1/2	UPC	PTS3US1AR-xxxM	PTS3US1AL-xxxM
ST	OM1	PC	PTS3PM1AR-xxxM	PTS3PM1AL-xxxM
ST	OM2	PC	PTS3PM2AR-xxxM	PTS3PM2AL-xxxM
ST	OM3	PC	PTS3PM3AR-xxxM	PTS3PM3AL-xxxM
ST	OM4	PC	PTS3PM4AR-xxxM	PTS3PM4AL-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
LC	OS1/2	APC	PTS4AS1AR-xxxM	PTS4AS1AL-xxxM
LC	OS1/2	UPC	PTS4US1AR-xxxM	PTS4US1AL-xxxM
LC	OM1	PC	PTS4PM1AR-xxxM	PTS4PM1AL-xxxM
LC	OM2	PC	PTS4PM2AR-xxxM	PTS4PM2AL-xxxM
LC	OM3	PC	PTS4PM3AR-xxxM	PTS4PM3AL-xxxM
LC	OM4	PC	PTS4PM4AR-xxxM	PTS4PM4AL-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits



Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
E2000	OS1/2	APC	PTS5AS1AR-xxxM	PTS5AS1AL-xxxM
E2000	OS1/2	UPC	PTS5US1AR-xxxM	PTS5US1AL-xxxM
E2000	OM1	PC	PTS5PM1AR-xxxM	PTS5PM1AL-xxxM
E2000	OM2	PC	PTS5PM2AR-xxxM	PTS5PM2AL-xxxM
E2000	OM3	PC	PTS5PM3AR-xxxM	PTS5PM3AL-xxxM
E2000	OM4	PC	PTS5PM4AR-xxxM	PTS5PM4AL-xxxM

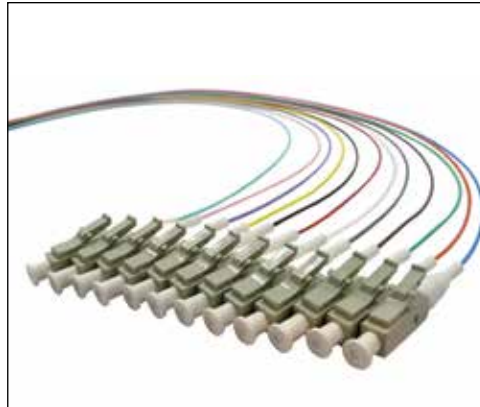
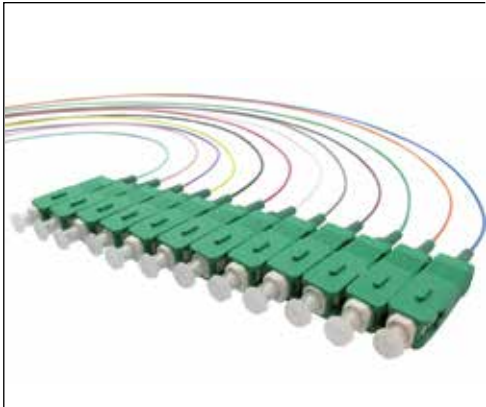
[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# PIGTAILS

## 12-COLOR PIGTAILS SET

Each pack of pigtail set contains 12pcs of pigtail with 12-color tight buffered cables that connectorized with specified connector on one end.

12-color pigtail set is offered in accordance to TIA/EIA-598 color coding, it helps users to enhance splicing efficiency.



FC Pigtail Set			Part No. <sup>(1)</sup>	
Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
FC	OS1/2	APC	PTT1AS1AR-xxxM	PTT1AS1AL-xxxM
FC	OS1/2	UPC	PTT1US1AR-xxxM	PTT1US1AL-xxxM
FC	OM1	PC	PTT1PM1AR-xxxM	PTT1PM1AL-xxxM
FC	OM2	PC	PTT1PM2AR-xxxM	PTT1PM2AL-xxxM
FC	OM3	PC	PTT1PM3AR-xxxM	PTT1PM3AL-xxxM
FC	OM4	PC	PTT1PM4AR-xxxM	PTT1PM4AL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

SC Pigtail Set			Part No. <sup>(1)</sup>	
Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
SC	OS1/2	APC	PTT2AS1AR-xxxM	PTT2AS1AL-xxxM
SC	OS1/2	UPC	PTT2US1AR-xxxM	PTT2US1AL-xxxM
SC	OM1	PC	PTT2PM1AR-xxxM	PTT2PM1AL-xxxM
SC	OM2	PC	PTT2PM2AR-xxxM	PTT2PM2AL-xxxM
SC	OM3	PC	PTT2PM3AR-xxxM	PTT2PM3AL-xxxM
SC	OM4	PC	PTT2PM4AR-xxxM	PTT2PM4AL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

## 12-COLOR PIGTAILS SET

ST Pigtail Set				
Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
ST	OS1/2	APC	PTT3AS1AR-xxxM	PTT3AS1AL-xxxM
ST	OS1/2	UPC	PTT3US1AR-xxxM	PTT3US1AL-xxxM
ST	OM1	PC	PTT3PM1AR-xxxM	PTT3PM1AL-xxxM
ST	OM2	PC	PTT3PM2AR-xxxM	PTT3PM2AL-xxxM
ST	OM3	PC	PTT3PM3AR-xxxM	PTT3PM3AL-xxxM
ST	OM4	PC	PTT3PM4AR-xxxM	PTT3PM4AL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

LC Pigtail Set				
Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
LC	OS1/2	APC	PTT4AS1AR-xxxM	PTT4AS1AL-xxxM
LC	OS1/2	UPC	PTT4US1AR-xxxM	PTT4US1AL-xxxM
LC	OM1	PC	PTT4PM1AR-xxxM	PTT4PM1AL-xxxM
LC	OM2	PC	PTT4PM2AR-xxxM	PTT4PM2AL-xxxM
LC	OM3	PC	PTT4PM3AR-xxxM	PTT4PM3AL-xxxM
LC	OM4	PC	PTT4PM4AR-xxxM	PTT4PM4AL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

E2000 Pigtail Set				
Item Description			Part No. <sup>(1)</sup>	
Types of Connector	Fiber Mode	Ferrule Polishing	Riser (OFNR)	Low Smoke Zero Halogen (LSZH)
E2000	OS1/2	APC	PTT5AS1AR-xxxM	PTT5AS1AL-xxxM
E2000	OS1/2	UPC	PTT5US1AR-xxxM	PTT5US1AL-xxxM
E2000	OM1	PC	PTT5PM1AR-xxxM	PTT5PM1AL-xxxM
E2000	OM2	PC	PTT5PM2AR-xxxM	PTT5PM2AL-xxxM
E2000	OM3	PC	PTT5PM3AR-xxxM	PTT5PM3AL-xxxM
E2000	OM4	PC	PTT5PM4AR-xxxM	PTT5PM4AL-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# MULTI-FIBER PRE-TERMINATED FIBER SOLUTION

Olab's Multi-fiber pre-terminated fiber solution is a customized cable assemblies solution that suitable for virtually all fiber optic networks.

Make according to customer specified length and fiber mode, available for all connector choices including FC, SC, ST, LC and E2000, our pre-terminated fiber solution offers from 4- to 144-Fiber with choices of OFNR, LSZH or OFNP cable jacket.



## KEY FEATURES :

- Customized and make to order which fits unique installation environment
- Available in all connector types with specified fiber count and jacket type
- Optional pulling grips for fast and easy installation
- Cable jacket options of plenum (OFNP), riser (OFNR) and low-smoke zero-halogen (LSZH)
- 100% factory-terminated and tested to meet and exceed all industry specifications
- Made to comply Telcordia GR-326-CORE

## Specifications

<b>Options of Assembly Structure</b>	Premise Fanout - with 900µm Fanout Legs Ruggedised Fanout - with 2mm Fanout Legs
<b>Cable Jacket Colors</b>	Yellow - Singlemode (OS1/2) Orange - Multimode (OM1, OM2) Aqua - Multimode (OM3, OM4)
<b>Connector Type Options</b>	FC/SC/ST/LC/E2000
<b>Endface Polish Options</b>	APC/UPC/PC
<b>Available Fiber Mode Options</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH) Plenum (OFNP)

# MULTI-FIBER PRE-TERMINATED FIBER SOLUTION

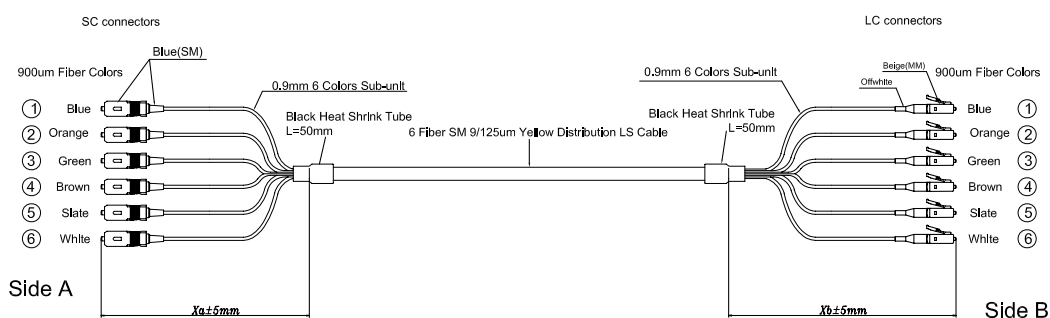
## PREMISE FANOUT

With 900µm direct fanout legs on both ends, the premise fanout is compact in size and space saving.

It is especially suitable for the backbone trunking or cabling installation within closet areas, such as inside cabinet, fiber enclosures or cable duct.

### Assembly Structure:

- Use of cable: Distribution Cable with 900µm buffered fiber
- Fanout: Heat shrink tube on both ends
- Fanout legs: 900µm buffered fiber direct fanout and connectorized with specified connector type



**Item Description:**  
Premise Fanout, SC/UPC-LC/UPC, 6-Fiber, Singlemode OS1/OS2, LSZH, Overall Length 10 Meters

**Made-to-Order Part No:**  
PAD3U4U006S1L4-M010

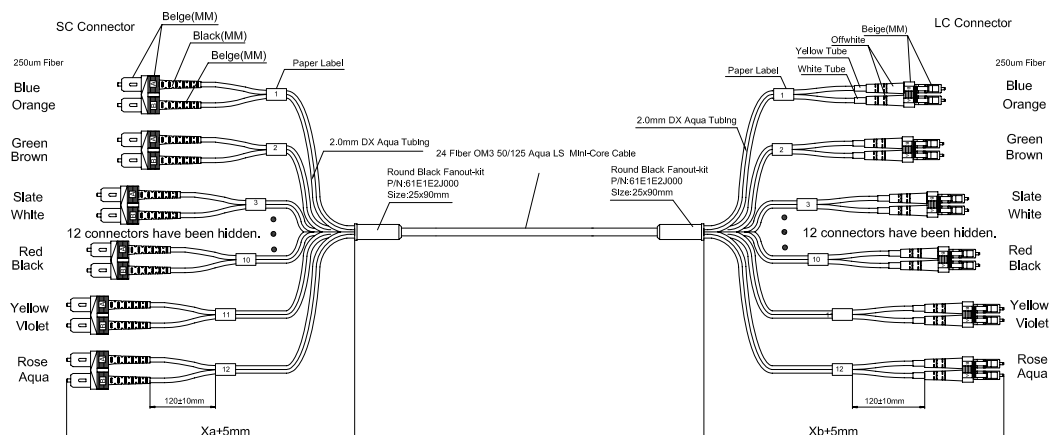
## RUGGEDISED FANOUT

Furcation through fanout kit with 2.0mm tubing, the ruggedised fanout solution is easy to install with superior cable bending, at the same time delivers the best fiber protection.

It is especially suitable for any backbone trunking or cabling installation that requires fiber protection.

### Assembly Structure:

- Use of cable: Mini-core Cable with 250µm primary coating fiber
- Fanout: Fanout kit on both ends
- Fanout legs: 2.0mm furcation legs and connectorized with specified connector type



**Item Description:**  
Ruggedised Fanout, SC/PC-LC/PC, 12-Fiber, OM3, LSZH, Overall Length 50 Meters

**Made-to-Order Part No:**  
PAM3P4P012M3L4-M050

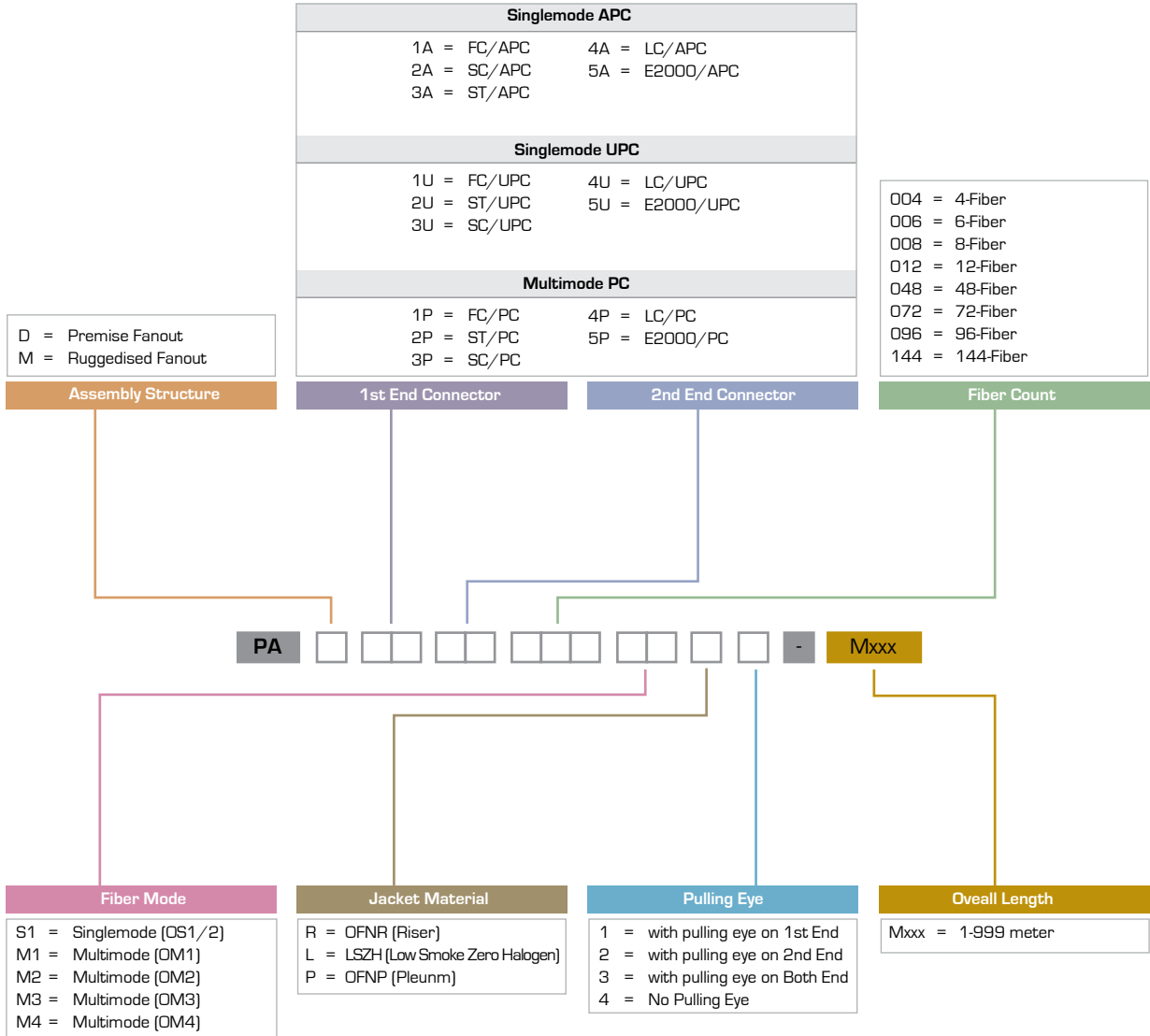
**!** PLEASE TURN TO PAGE 48 FOR THE "Made-to-Order Part Numbering Chart".



# MULTI-FIBER PRE-TERMINATED FIBER SOLUTION

## MUTI-FIBER PRE-TERM ASSEMBLIES

### Made-To-Order Part Numbering Chart



Notes:  
 1) If not otherwise stated, all Olabs pre-terminated fanout assemblies are having fanout legs 500mm on both ends  
 2) Customized fanout legs or stagger legs can be made per request, please contact our support team for details

# MPO TRUNK ASSEMBLIES

Customized fiber cable assemblies pre-terminated with 12- or 24-Fiber MPO connectors with customer-specified lengths.

Options of 12-, 24-, 36-, 48-, 72-, 96-, and 144-Fiber in specific fiber modes.

This MPO trunk assemblies is compatible with the plug-and-play fiber cassette and enclosures to achieve the best installation efficiency.



## KEY FEATURES :

- Options of MPO pinned (Male type) and non-pinned (Female type) connectors
- Use 12- or 24-Fiber MPO connector for termination
- Construct of round mini-core cable for space saving and high density applications
- Available in 12-, 24-, 48-, 72-, 96-, 144-Fiber
- Cable jacket options of OFNR, LSZH and OFNP
- Customizable cable lengths and fiber polarity
- Optional pulling eyes for ease of installation
- Made to comply Telcordia GR-326-CORE

## Specifications

<b>Cable Structure</b>	Mini-core Cable
<b>Cable Jacket Colors</b>	Yellow - Singlemode (OS 1/2) Orange - Multimode (OM1, OM2) Aqua - Multimode (OM3, OM4)
<b>Connector Type Options</b>	Pinned MPO (Male) Non-pinned MPO (Female)
<b>Available Fiber Mode Options</b>	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH) Plenum (OFNP)

## Optical Performance

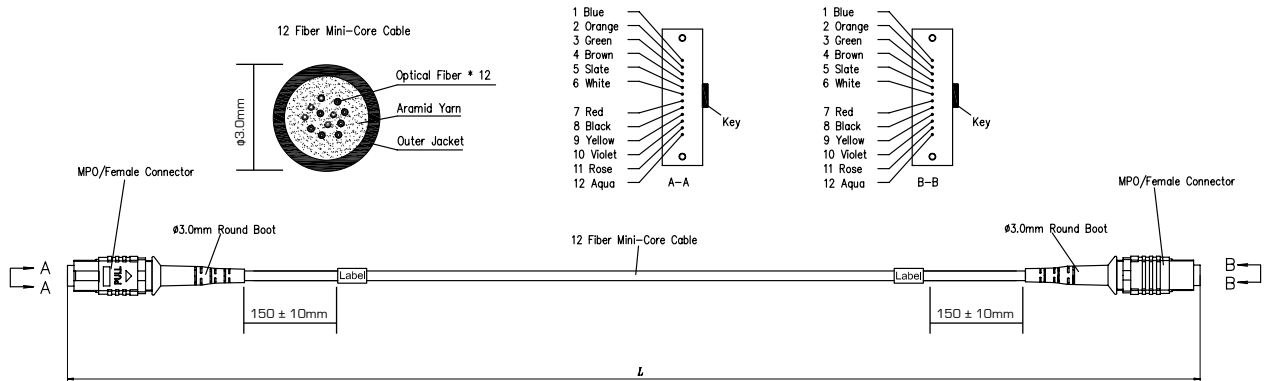
Type	Standard MPO		Low Loss MPO	
<b>Fiber Mode</b>	Singlemode @1310nm	Multimode @850nm	Singlemode @1310nm	Multimode @850nm
<b>Insertion Loss</b>	≤ 0.75dB Typical 0.25 dB	≤ 0.6dB Typical 0.25 dB	≤ 0.35dB Typical 0.10 dB	≤ 0.35dB Typical 0.10 dB
<b>Return Loss</b>	≥ 50dB	≥ 20dB	≥ 55dB	≥ 20dB

\* Customized optical performance is available upon request, please contact Olabs team for details.

# MPO TRUNK ASSEMBLIES

## MPO PATCHCORDS

12-Fiber or 24-Fiber MPO connectors terminated on both ends by using mini-core cable. It is suitable for directly patching with the high speed and high density equipment where MPO interface is using.



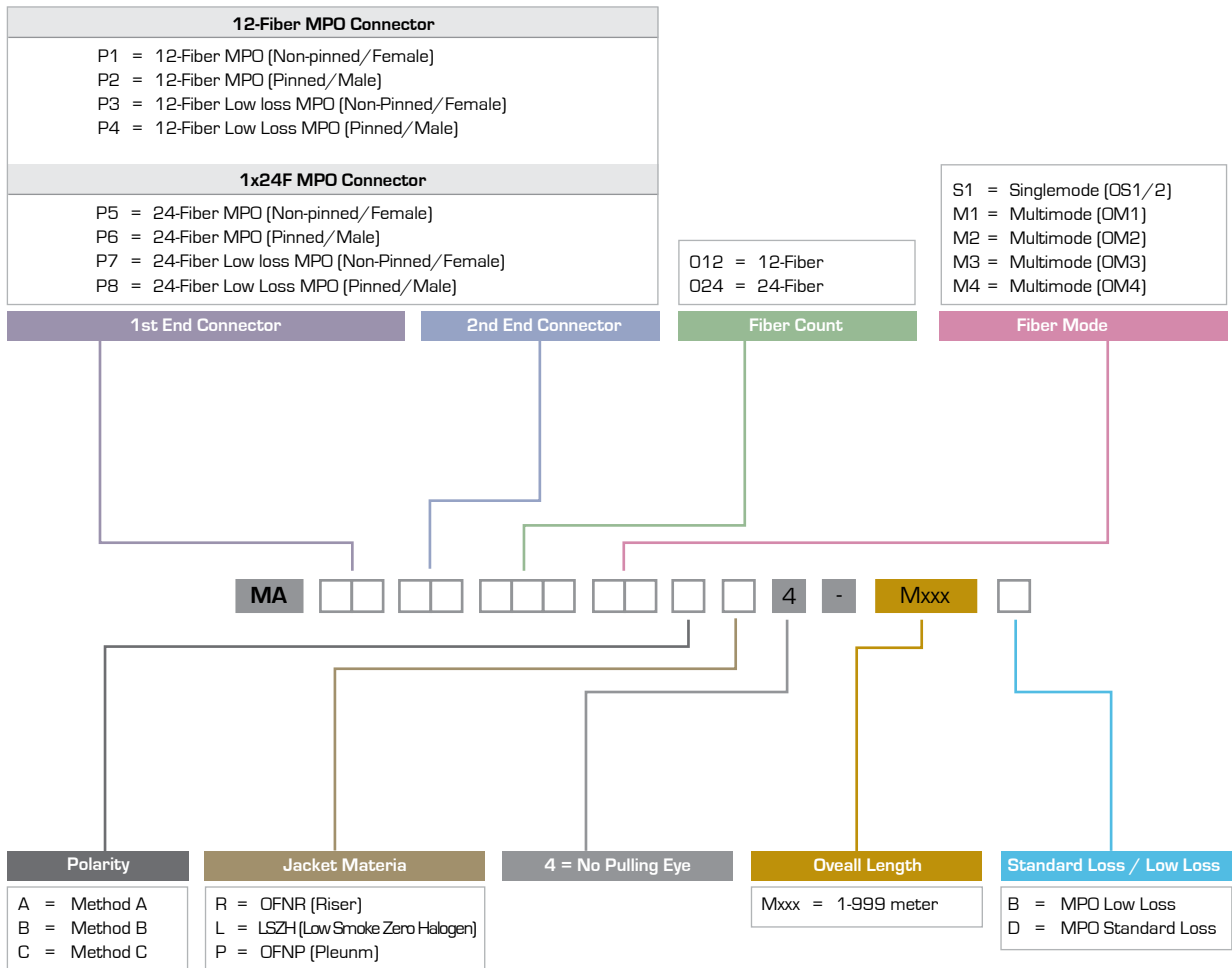
**Item Description:**

MPO Patchcord, MPO-Female to MPO-Female, 12-Fiber, Singlemode OS1/OS2, Polarity A, LSZH, Length 10 Meters

**Made-to-Order Part No:**

MAP1P1012S1AL4-M010D

### Made-To-Order Part Numbering Chart



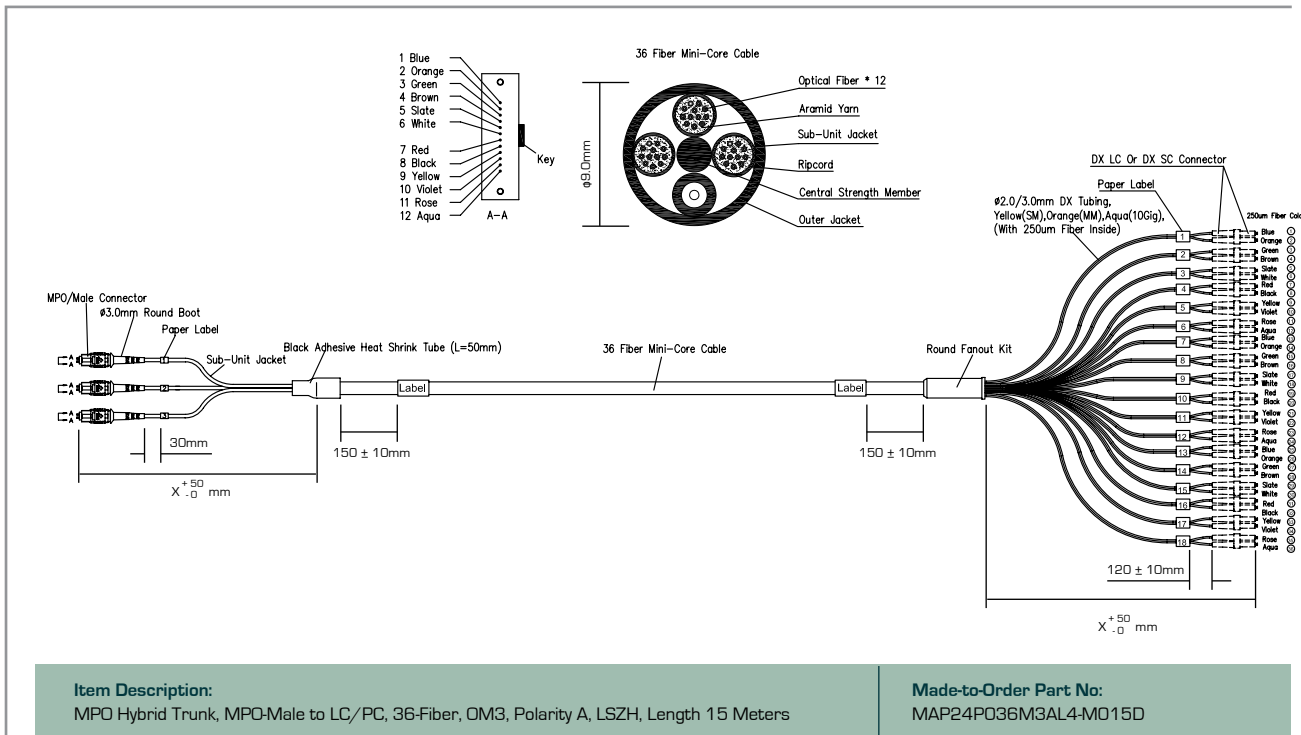
# MPO TRUNK ASSEMBLIES

## MPO TRUNKS AND HYBRID TRUNKS

MPO trunk is having both ends MPO connectors terminated on a mini-core multifiber cables. Various structures according to customer specified configuration.

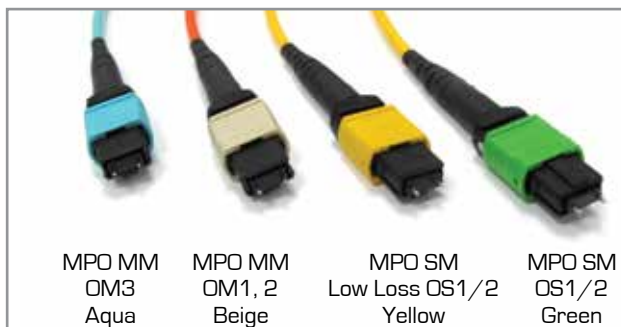
MPO hybrid trunk is the fiber assembly having MPO connectors on one end, and generic single-fiber connectors on another end.

It can be highly customizable with different combinations on the type of connectors, fiber modes, fiber counts, lengths and polarity.



**!** PLEASE TURN TO PAGE 52 FOR THE "Made-to-Order Part Numbering Chart".

### MPO CONNECTOR HOUSING COLOR







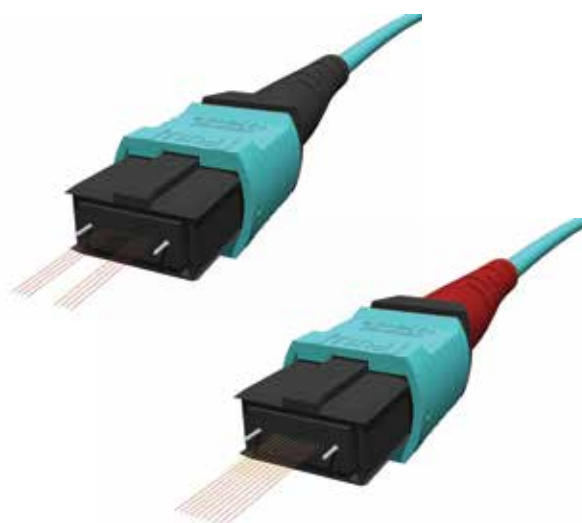
# MPO ASSEMBLIES FOR 40G/100G

MPO Assemblies that specially designed for laser optimized 40G/100G structured cabling system that employs parallel optics transmission.

For 40G Ethernet, 4 Tx and 4 Rx fibers are transmitted at 10G for an aggregate of 40G by utilizing a 12-Fiber MPO connector.

Likewise, a 100G Ethernet is to use 10 Tx and 10 Rx fibers that are transmitted at 10G for an aggregate of 100G by using a 24-Fiber MPO connector.

Alternatively, 100G using 4 Tx and Rx to transit 25G over 2pcs of 12-Fiber MPO connector.



## KEY FEATURES :

- Most cost effective solution for getting 40G/100G transmissions for short reach systems
- Pre-terminated 12-Fiber or 24-Fiber MPO solutions offered in customized configurations
- Specifically terminated with unique fiber channeling to cater for 40G/100G Ethernet
- High Density solution within tiniest physical space
- To support high bandwidth applications

## Specifications

<b>Unique Fiber Channeling for 40G/100G Ethernet</b>	40G on 12-Fiber MPO connector
	Channel #1~4 for Tx, Channel #9~12 for Rx Channel #5~8 unused
	100G on 2pcs of 12-Fiber MPO connector
	Channel #2~11 for Tx to the first connector Channel #2~11 for Rx to the second connector Channel #1 & #12 unused for both connectors
	100G on 24-Fiber MPO connector
	Channel #2~11 for Rx Channel #14~23 for Tx Channel #1, 12, 13, 24 unused
<b>Cable Structure</b>	Mini-core Cable
<b>Cable Jacket Colors</b>	Yellow - Singlemode (OS 1/2)
	Orange - Multimode (OM1, OM2)
	Aqua - Multimode (OM3, OM4)
<b>Connector Type Options</b>	Pinned MPO (Male)
	Non-pinned MPO (Female)
<b>Available Fiber Mode Options</b>	Singlemode (OS 1/2)
	Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR)
	Low Smoke Zero Halogen (LSZH)
	Plenum (OFNP)

# MPO ASSEMBLIES FOR 40G/100G

## Optical Performance

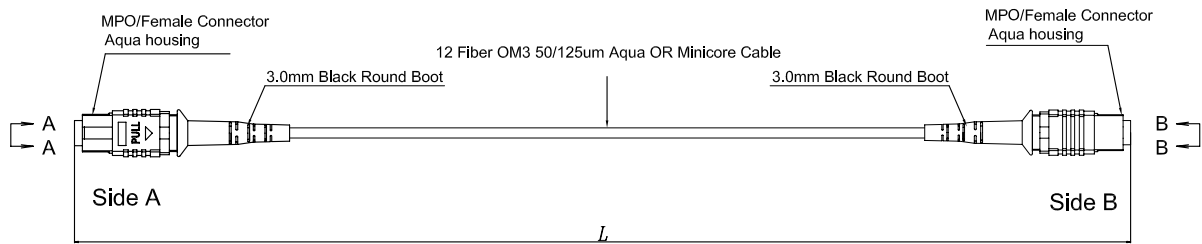
Type	Standard MPO		Low Loss MPO	
Fiber Mode	Singlemode	Multimode	Singlemode	Multimode
	@1310nm	@850nm	@1310nm	@850nm
Insertion Loss	≤ 0.75dB	≤ 0.6dB	≤ 0.35dB	≤ 0.35dB
	Typical 0.25 dB	Typical 0.25 dB	Typical 0.10 dB	Typical 0.10 dB
Return Loss	≥ 50dB	≥ 20dB	≥ 55dB	≥ 20dB

\* Customized optical performance is available upon request, please contact Olabs team for details.

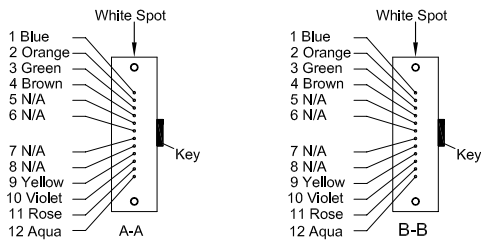
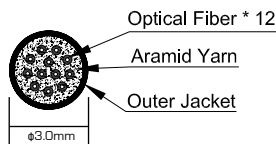
## 40G MPO ASSEMBLIES

40G on 12-Fiber MPO connector

Channels #1~4 for Tx  
 Channels #9~12 for Rx  
 Channels #5~8 unused



12 Fiber Mini-Core Cable



40G: 1 x 12F MPO Fiber Chart

Fiber colour	Optical Tranciever	Optical Tranciever
Blue	Tx-1	Rx-1
Orange	Tx-2	Rx-2
Green	Tx-3	Rx-3
Brown	Tx-4	Rx-4
Not used	N/A-5	N/A-5
Not used	N/A-6	N/A-6
Not used	N/A-7	N/A-7
Not used	N/A-8	N/A-8
Yellow	Rx-9	Tx-9
Violet	Rx-10	Tx-10
Rose	Rx-11	Tx-11
Aqua	Rx-12	Tx-12

40G 12-Fiber MPO connector - Channel 1-4 are Transmit (Tx)  
 - Channel 9-12 are Receive (Rx)  
 - Channel 5-8 are not used

**Item Description:**

40G MPO Patchcord, MPO-Female to MPO-Female, 12-Fiber, OM3, Polarity A, Riser, Length 10 Meter

**Made-to-Order Part No:**

MLG1G112M3AR-M010D

**!** PLEASE TURN TO PAGE 57 FOR THE "Made-to-Order Part Numbering Chart".

# MPO ASSEMBLIES FOR 40G/100G

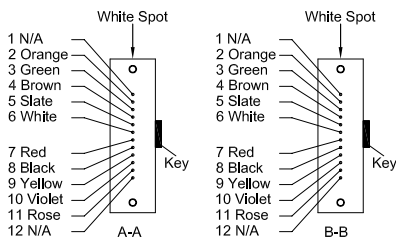
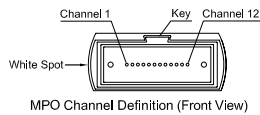
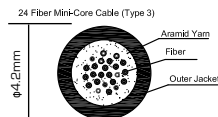
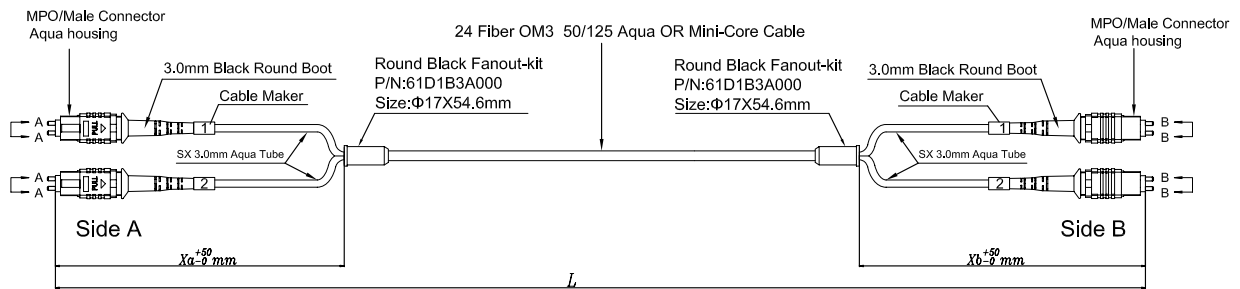
## 100G MPO ASSEMBLIES

100G on 2pcs of 12-Fiber MPO connector

Channel #2~11 for Tx to the first connector

Channel #2~11 for Rx to the second connector

Channel #1 & #12 unused for both connectors



100G: 2 x 12F MPO Fiber Chart

Fiber colour	MPO	MPO
Not used	N/A-1	N/A-1
Orange	Tx-2	Rx-2
Green	Tx-3	Rx-3
Brown	Tx-4	Rx-4
Grey	Tx-5	Rx-5
White	Tx-6	Rx-6
Red	Tx-7	Rx-7
Black	Tx-8	Rx-8
Yellow	Tx-9	Rx-9
Violet	Tx-10	Rx-10
Rose	Tx-11	Rx-11
Not used	N/A-12	N/A-12

100G 2x12-Fiber MPO connector - Channel 2 to 11 are Transmit [Tx] to the first connector  
 - Channel 2 to 11 are Receive [Rx] to the second connector  
 - Channel 1 to 12 are not used for both connectors

**Item Description:**

100G MPO Patchcord over 2x12F MPO Connector  
 MPO-Male to MPO-Male, 24-Fiber, OM3, Polarity A, LSZH, Length 5 Meters

**Made-to-Order Part No:**

MLG4G424M3AL-M005D



PLEASE TURN TO PAGE 57 FOR THE "Made-to-Order Part Numbering Chart".

# MPO ASSEMBLIES FOR 40G/100G

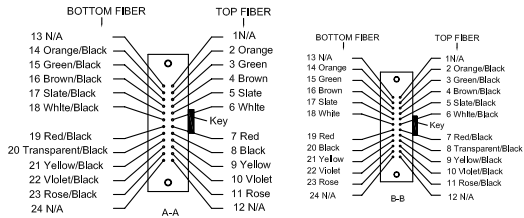
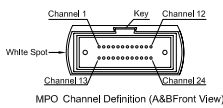
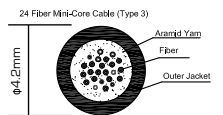
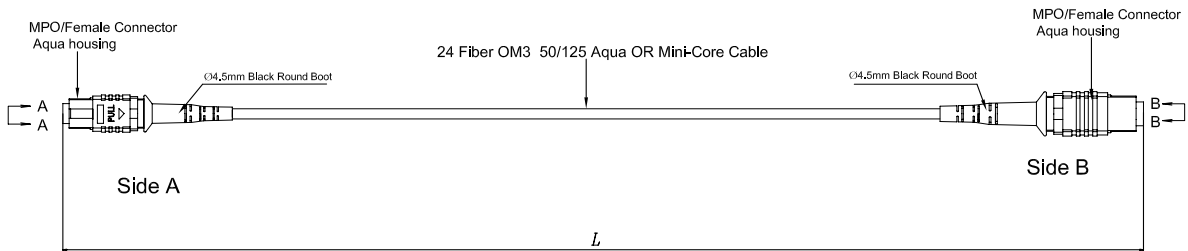
## 100G MPO ASSEMBLIES

100G on 24-Fiber MPO connector

Channel #2~11 for Rx

Channel #14~23 for Tx

Channel #1, 12, 13, 24 unused



100G: 1 x 24F MPO Fiber Chart

Fiber colour	MPO Top Row	MPO Bottom Row
Not used	N/A-1	N/A-13
Orange	Rx-2	Tx-14
Green	Rx-3	Tx-15
Brown	Rx-4	Tx-16
Grey	Rx-5	Tx-17
White	Rx-6	Tx-18
Red	Rx-7	Tx-19
Black	Rx-8	Tx-20
Yellow	Rx-9	Tx-21
Violet	Rx-10	Tx-22
Rose	Rx-11	Tx-23
Not used	N/A-12	N/A-24

100G 1 x 24-Fiber MPO connector - Channel 2 to 11 are Receive [Rx] for the top row  
 - Channel 14 to 23 are Transmit [Tx] for the bottom row  
 - Channel 1, 12, 23 & 24 are not used

**Item Description:**

100G MPO Patchcord over 1x24F MPO Connector  
 MPO-Female to MPO-Female, 24-Fiber, OM3, Polarity A, Riser, Length 20 Meters

**Made-to-Order Part No:**

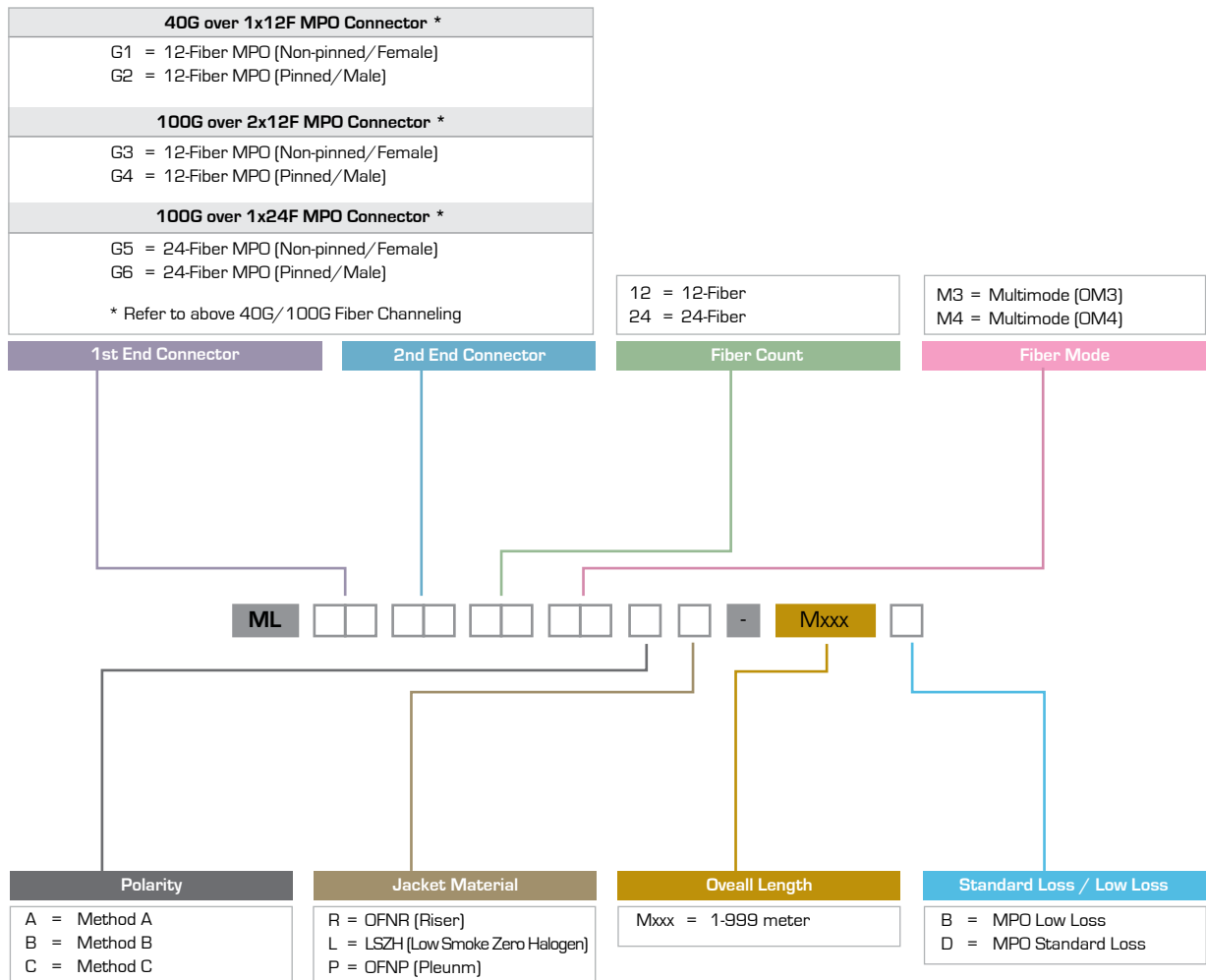
MLG5G524M3AR-M020D

**!** PLEASE TURN TO PAGE 57 FOR THE "Made-to-Order Part Numbering Chart".

# MPO ASSEMBLIES FOR 40G/100G

## 40G/100G MPO ASSEMBLIES

### Made-To-Order Part Numbering Chart



# MPO LOOPBACK FOR 40G/100G

Olabs MPO Loopback is offered in female version which is suitable to mate with any MPO adapter or device port.

It is designed to mate directly to a parallel optical device such as a Quad Small Form Factor Pluggable (QSFP) transceiver for network diagnosing and testing.

Our MPO loopback offers the ability to simulate network distances within the device.



## KEY FEATURES :

- Ruggedized plastic housing design
- Compact in size and easy to use
- High precision alignment with superior optical loss
- Can accommodate specific optical-routing needs
- Options for 12- or 24-Fibers MPO interface

## Specifications

<b>Fiber Channeling Options</b>	For use with 40G on 12-Fiber MPO interface Channel #5~8 unused
	For use with 100G over 12-Fiber MPO interface Channel #1 & #12 unused
	For use with 100G over 24-Fiber MPO interface Channel #1, 12, 13, 24 unused
<b>Fiber Type</b>	Bend Insensitive Fiber
<b>Connector Options</b>	12-Fiber Standard MPO Non-pinned (Female) 24-Fiber Standard MPO Non-pinned (Female) 12-Fiber Low Loss MPO Non-pinned (Female) 24-Fiber Low Loss MPO Non-pinned (Female)
<b>Fiber Count Options</b>	12-Fiber/24-Fiber
<b>Available Fiber Mode</b>	Multimode (OM3, OM4)
<b>Jacket Material</b>	Low Smoke Zero Halogen (LSZH)

## Optical Performance

Type	Standard MPO Multimode	Low Loss MPO Multimode
<b>Fiber Mode</b>	850nm	1310nm
<b>Insertion Loss</b>	≤ 1dB	≤ 0.6dB
<b>Return Loss</b>	≥ 20dB	≥ 20dB



# MPO LOOPBACK FOR 40G/100G

## 12-FIBER MPO LOOPBACK FOR 40G

Fiber Channel #5 ~ 8 unused

40G: 1 x 12F MPO Fiber Chart

Fiber colour	Optical Tranceiver	Optical Tranceiver
Blue	Tx-1	Rx-1
Orange	Tx-2	Rx-2
Green	Tx-3	Rx-3
Brown	Tx-4	Rx-4
Not used	N/A-5	N/A-5
Not used	N/A-6	N/A-6
Not used	N/A-7	N/A-7
Not used	N/A-8	N/A-8
Yellow	Rx-9	Tx-9
Violet	Rx-10	Tx-10
Rose	Rx-11	Tx-11
Aqua	Rx-12	Tx-12

40G 12-Fiber MPO connector - Channel 1-4 are Transmit (Tx)  
 - Channel 9-12 are Receive (Rx)  
 - Channel 5-8

Item Description			Part No.
Connector Type	Fiber Count	Fiber Mode	
Standard MPO Non-pinned (Female)	12	OM3	LBMF3M3D
	12	OM4	LBMF3M4D
Low Loss MPO Non-pinned (Female)	12	OM3	LBEF3M3B
	12	OM4	LBEF3M4B

## 12-FIBER MPO LOOPBACK FOR 100G

Channel #1 & #12 unused

100G: 2 x 12F MPO Fiber Chart

Fiber colour	MPO	MPO
Not used	N/A-1	N/A-1
Orange	Tx-2	Rx-2
Green	Tx-3	Rx-3
Brown	Tx-4	Rx-4
Grey	Tx-5	Rx-5
White	Tx-6	Rx-6
Red	Tx-7	Rx-7
Black	Tx-8	Rx-8
Yellow	Tx-9	Rx-9
Violet	Tx-10	Rx-10
Rose	Tx-11	Rx-11
Not used	N/A-12	N/A-12

100G 2 x 12-Fiber MPO connector - Channel 2 to 11 are Transmit (Tx) to the first connector  
 - Channel 2 to 11 are Receive (Rx) to the second connector  
 - Channel 1 to 12 are not used for both connectors

Item Description			Part No.
Connector Type	Fiber Count	Fiber Mode	
Standard MPO Non-pinned (Female)	12	OM3	LBMF4M3D
	12	OM4	LBMF4M4D
Low Loss MPO Non-pinned (Female)	12	OM3	LBEF4M3B
	12	OM4	LBEF4M4B

## 24-FIBER MPO LOOPBACK FOR 100G

Channel #1, #12, #13, #24 unused

100G: 1 x 24F MPO Fiber Chart

Fiber colour	MPO Top Row	MPO Bottom Row
Not used	N/A-1	N/A-13
Orange	Rx-2	Tx-14
Green	Rx-3	Tx-15
Brown	Rx-4	Tx-16
Grey	Rx-5	Tx-17
White	Rx-6	Tx-18
Red	Rx-7	Tx-19
Black	Rx-8	Tx-20
Yellow	Rx-9	Tx-21
Violet	Rx-10	Tx-22
Rose	Rx-11	Tx-23
Not used	N/A-12	N/A-24

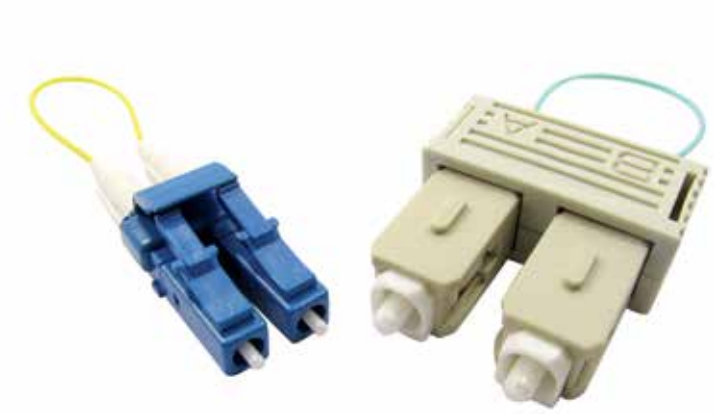
100G 1 x 24-Fiber MPO connector - Channel 2 to 11 are Receive (Rx) for the top row  
 - Channel 14 to 23 are Transmit (Tx) for the bottom row  
 - Channel 1, 12, 23 & 24 are not used

Item Description			Part No.
Connector Type	Fiber Count	Fiber Mode	
Standard MPO Non-pinned (Female)	24	OM3	LBMF5M3D
	24	OM4	LBMF5M4D
Low Loss MPO Non-pinned (Female)	24	OM3	LBEF5M3B
	24	OM4	LBEF5M4B

# LC, SC LOOPBACK ASSEMBLIES

Loopback assemblies with SC or LC connector interface that is typically used for testing and network diagnostics.

Available in singlemode (OS1/2) and multimode (OM1, OM2, OM3, OM4).



## KEY FEATURES :

- SC or LC connector interface
- Superior optical loss to provide accurate test data
- Excellent exchangeability and mating durability (500 cycles)
- Customized loop length upon request

## Specifications

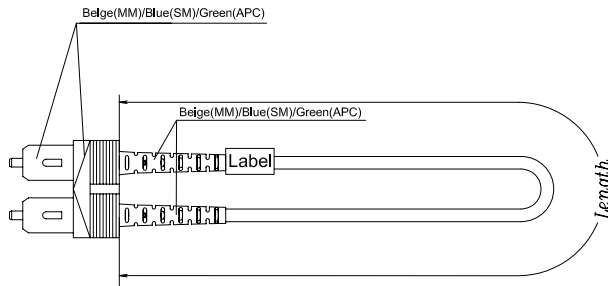
<b>Cable Type</b>	2mm Simplex Cable
<b>Connector Options</b>	SC/LC
<b>Endface Polish Options</b>	APC/UPC/PC
<b>Available Fiber Modes</b>	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR) Low Smoke Zero Halogen (LSZH)

## Optical Performance

Type	Single Mode UPC	Single Mode APC	Multi-Mode
<b>Channel Loss</b>	≤ 0.8dB	≤ 0.8dB	≤ 0.8dB
<b>Return Loss</b>	≥ 55dB	≥ 65dB	≥ 25dB
<b>Test Wavelength</b>	1310nm	1310nm	850nm

# LC, SC LOOPBACK ASSEMBLIES

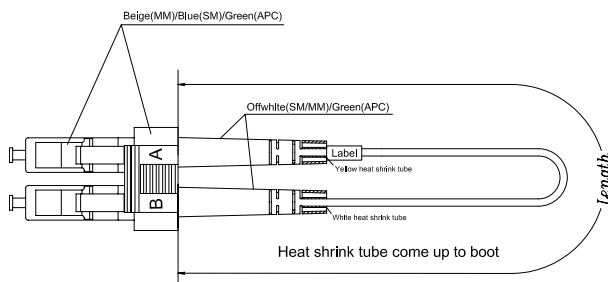
## SC LOOPBACK ASSEMBLY



Item Description			Part No.
Connector Type	Ferrule Polishing	Fiber Mode	
SC	APC	OS1/2	LB2AS1BL
	UPC	OS1/2	LB2US1BL
	PC	OM1	LB2PM1BL
	PC	OM2	LB2PM2BL
	PC	OM3	LB2PM3BL
	PC	OM4	LB2PM4BL

\* "Length" is 200mm as standard, please contact Olabs team for customized length.

## LC LOOPBACK ASSEMBLY



Item Description			Part No.
Connector Type	Ferrule Polishing	Fiber Mode	
LC	APC	OS1/2	LB4AS1BL
	UPC	OS1/2	LB4US1BL
	PC	OM1	LB4PM1BL
	PC	OM2	LB4PM2BL
	PC	OM3	LB4PM3BL
	PC	OM4	LB4PM4BL

\* "Length" is 200mm as standard, please contact Olabs team for customized length.

# SC NO POLISH CONNECTOR

SC No-Polish Connector that suitable for any fiber terminations for drop cables, 250µm, 900µm buffered cables or 2.0/3.0mm cables.

The connector is offered in Singlemode UPC (Blue housing) or APC (Green housing) with excellent optical performance that achieve typical insertion loss of 0.15dB.



## KEY FEATURES :

- Patent pending innovative C-slot ferrule design secures highest precision on fiber alignment
- Field installable without special tools or equipment
- Complete terminations in less than 3 minutes in average
- Features only 3 components for easy operation
- No adhesives, crimping or polishing is needed
- Compatible with conventional SC connectors

## Specifications

<b>Compatible Cable Types</b>	900µm Buffered Cable 2.0mm or 3.0mm Cable 2 x 3mm Drop Cable
<b>Connector Type</b>	SC
<b>Ferrule Type</b>	Ceramic
<b>Endface Options</b>	APC/UPC
<b>Fiber Mode</b>	Singlemode (OS1/2)
<b>Operating Temperature</b>	- 40°C to + 85°C
<b>Mechanical Performance</b>	Straight Pulling Force 30N *
<b>Mating Durability</b>	< 0.1dB after 500 Mating
<b>Insertion Loss</b>	Typical 0.15dB Maximum 0.40dB
<b>Return Loss</b>	55dB

\* Pulling strength varies depending on use of cable

# SC NO POLISH CONNECTOR

## USE WITH 900µm BUFFERED CABLE

Suitable for use with 250µm primary coating bare fiber or 900µm buffered cables.



Item Description			Part No.
Connector/Polish	Fiber Mode	Connector Housing	
SC/APC	OS1/2	Green	NC2AS1T1
SC/UPC	OS1/2	Blue	NC2US1T1
SC/PC	OM1	Grey	NC2PM1T1
SC/PC	OM2	Grey	NC2PM2T1

## USE WITH 2.0MM CABLE

Suitable for use with 2.0mm simplex indoor cables.



Item Description			Part No.
Connector/Polish	Fiber Mode	Connector Housing	
SC/APC	OS1/2	Green	NC2AS1T2
SC/UPC	OS1/2	Blue	NC2US1T2
SC/PC	OM1	Grey	NC2PM1T2
SC/PC	OM2	Grey	NC2PM2T2

## USE WITH 3.0MM CABLE

Suitable for use with 3.0mm simplex indoor cables.



Item Description			Part No.
Connector/Polish	Fiber Mode	Connector Housing	
SC/APC	OS1/2	Green	NC2AS1T3
SC/UPC	OS1/2	Blue	NC2US1T3
SC/PC	OM1	Grey	NC2PM1T3
SC/PC	OM2	Grey	NC2PM2T3

## USE WITH 2 x 3MM DROP CABLE

Suitable for use with 2 x 3mm drop cables.



Item Description			Part No.
Connector/Polish	Fiber Mode	Connector Housing	
SC/APC	OS1/2	Green	NC2AS1T4
SC/UPC	OS1/2	Blue	NC2US1T4

\*\* Multimode Grey housing connector is not available for using with drop cable

# ATTENUATORS

Plug Type Attenuator with attenuation ranges from 1 to 20dB in 1.0dB increment.

Offered in FC, SC or LC connector styles in UPC or APC polishing.

## KEY FEATURES :

- Fixed attenuation in pluggable male-to-female style
- Precise attenuation & tight tolerance
- Low back reflection
- High power application and wide wavelength range
- Choices of different connector styles in UPC or APC polishing



## Specifications

<b>Attenuator Type</b>	Plug Type Fixed Attenuator
<b>Connector Types</b>	SC, FC, LC
<b>Ferrule Polishing Options</b>	UPC/APC
<b>Attenuation Range</b>	1 ~ 20dB in 1.0dB increment
<b>Attenuation Accuracy</b>	1 ~ 5dB : +/- 0.5dB 6 ~ 20dB : +/- 10%
<b>Operating Wavelength</b>	1310 & 1550nm (stable attenuation within 1250 ~ 1650nm)
<b>Return Loss</b>	UPC : 50dB APC : 60dB
<b>Operating Temperature</b>	-40°C to +75°C



FC Attenuator  
(UPC Polishing)



LC Attenuator  
(UPC Polishing)



SC Attenuator  
(UPC Polishing)



LC Attenuator  
(APC Polishing)

Item Description		Part No. <sup>(1)</sup>
Connector Type	Ferrule Polishing	
FC	UPC	ATP1U-xxdB
FC	APC	ATP1A-xxdB
SC	UPC	ATP3U-xxdB
SC	APC	ATP3A-xxdB
LC	UPC	ATP4U-xxdB
LC	APC	ATP4A-xxdB

(1) \*xx refers to dB options from "01" to "20" dB in 1dB increment



# FIBER OPTIC CLEANING KITS

Fiber Optic Cleaning kit consists of a carry case, reel-type cassette cleaner, cleaning stick, cleaning air and cleaning wipes.

A compact, user , user friendly, safe and effective solution for field cleaning of fiber optic connector end-faces, adapters alignment sleeves, and on patchcords.



## KEY FEATURES :

- Suitable for engineering labs, production line and field cleaning applications
- Each kit consists of a carry case, reel-type cassette cleaner, cleaning stick, cleaning air and cleaning wipes
- Compact and light weight, easy to use, environmental friendly
- Reliable cleaning performance for all types of fiber optic connectors

### Items Included in the Cleaning Kit :

Item	Qty
Cassette Cleaner	1 set
Replacement Tape	1pc
Cleaning Sticks - for 2.5mm Ferrule (FC, SC, ST, D4)	10pcs
Cleaning Sticks - for 1.25mm Ferrule (LC, MU, E2000)	10pcs
Clean Air (Pure compressed gas bottle)	1pc
Cleaning Wipes	10 packs

Item Description	Part No.
Fiber Optic Cleaning Kits	CLK001

# FIBER ENCLOSURES

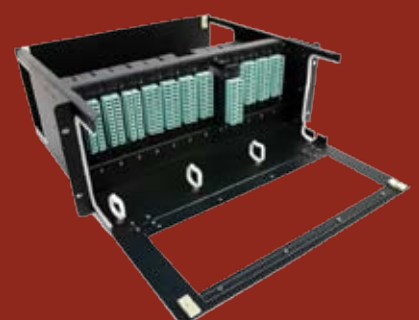
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Olabs modular rack enclosure system **CREATES** the foundation for optimizing efficiency of the network physical infrastructure

Olabs offers flexible range of fiber enclosure solutions for optimizing your physical network infrastructure. Our seamless end-to-end rackmount and wallmount enclosure systems are designed with the concept of flexibility and accommodative in a modular and scalable design.

Our solutions provide highly flexible features that allow easy reconfiguration for moves, adds and changes in a practical and free of fancy manner.

The Rackmount solutions are offered with different structural designs include Fixed Type and Drawer Type, with choices of 3 depths ranging from 200mm[D200 Series], 240mm [D240 Series] to 380mm [D380 Series] in 1U, 2U or 4U. The Wallmount solutions are offered in 5 different size and fiber capacity, they fit virtually any installation environments.



## RACK ENCLOSURE - D380 SERIES

P.68	D380 - 1U, 2U, 4U Splicing Enclosure
P.71	D380 - 1U, 2U, 4U Patching Enclosure

## RACK ENCLOSURE - D240 SERIES

P.74	D240 - 1U Enclosure for Splicing/Patching
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## RACK ENCLOSURE - D200 SERIES

P.76	D200 - 1U Enclosure for Splicing/Patching
P.78	D200 - 1U Enclosure with Cable Management Rings for Splicing/Patching

## RACK ENCLOSURE FOR MPO PLUG-AND-PLAY SYSTEM

P.80	D380 - 1U, 2U, 4U MPO Plug-and-Play Rackmount Enclosures
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## MPO CASSETTE MODULES

P.83	MPO Cassette Modules
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## WALLMOUNT ENCLOSURES

P.87	Indoor Wallmount Enclosures
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## ADAPTER FACEPLATES

P.90	Rackmount Adapter Faceplates
P.93	Wallmount Adapter Faceplates

# D380 - 1U, 2U, 4U SPLICING ENCLOSURE

380mm depth rack-mountable enclosure in 1U, 2U or 4U is designed for supporting direct splicing.

Compatible with 19" EIA standard cabinets and rack system, the enclosure is offered with the options of modular Drawer Type or Fixed Type that pre-installed with splicing kit, cable management spools and snap-in adapter faceplates (optional) with selection of different interfaces and fiber modes.



## KEY FEATURES :

- Offered in 1U, 2U or 4U with choices of Drawer Type and Fixed Type
- Accommodate with splice trays and cable management accessories
- Re-lockable front plate with hinges
- Adjustable rackmount ears
- Modular drawer (Drawer Type) can be removed completely from the enclosure
- Inter-changeable drawers (Drawer Type) support easy reconfiguration
- Transparent front plate (for 4U)

## Specifications

<b>Main Material</b>	Standard offer : Steel Option of Aluminium on request
<b>Dimension</b>	1U x 435mm x 380mm
<b>Height (U) x Width (W) x Depth (D)</b>	2U x 435mm x 380mm
	4U x 435mm x 380mm
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Available Fiber Modes</b>	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA-310
<b>Preloaded Units</b>	Splicing Kits Cable Management Spools Adjustable Rackmount Ears, 70mm from the front plate (x 2pcs) Modular Drawer (For Drawer Type Only) Snap-in Adapter Faceplates (Optional items to order separately, refer to Page 90 ~ 92)

# D380 - 1U, 2U, 4U SPLICING ENCLOSURE

## DRAWER TYPE

All Drawer Type Enclosures are designed to accommodate with modular sliding drawer for allowing easy reconfiguration for moves, adds and changes. They are offered with options of 1U, 2U or 4U.

The sliding drawers for this splicing enclosure are offered in either 1U (for housing 2 or 3pcs adapter faceplates), or 2U (for housing 4 or 6pcs adapter faceplates)

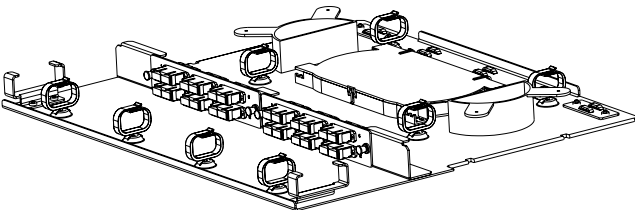


Example of Drawer Type Splicing Enclosure in 2U, preloaded with 1 pc of S4A Drawer, 4-slot, 48F, SC Beige Adapter  
P/N: D03-04-A4R

### Types of Modular Drawer

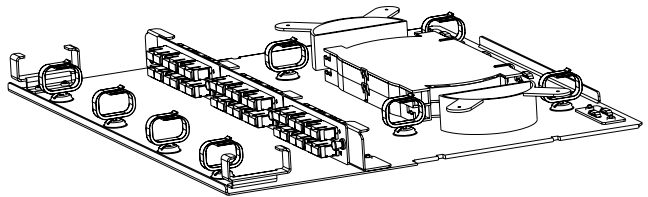
4 options of splicing drawers can be flexibly bundled with either 1U height with 2- or 3-slot, and 2U height with 4- or 6-slot.

**Drawer Style: S2A**



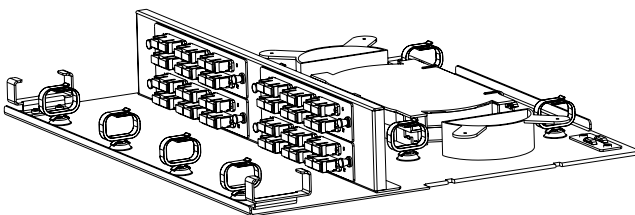
Splicing drawer of 1U Height with 2-slot  
Use to house 2pcs of Size-A Faceplate (refer to Page 90)

**Drawer Style: S3B**



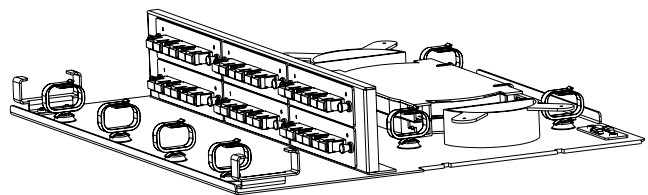
Splicing drawer of 1U Height with 3-slot  
Use to house 3pcs of Size-B Faceplate (refer to Page 90)

**Drawer Style: S4A**



Splicing drawer of 2U Height with 4-slot  
Use to house 4pcs of Size-A Faceplate (refer to Page 90)

**Drawer Style: S6B**



Splicing drawer of 2U Height with 6-slot  
Use to house 6pcs of Size-B Faceplate (refer to Page 90)

# D380 - 1U, 2U, 4U SPLICING ENCLOSURE

## DRAWER TYPE

Item Description						Max. Fiber Capacity Per Enclosure			Part No.	
Rack Unit	Faceplate Slot Orientation	No. of Drawer Preloaded	Type of Drawer Preloaded <sup>(1)</sup>	Total No. of Faceplate Slot per Enclosure	Suitable Faceplate Size (H x W in mm)	FC/ST	SC	LC	P/N for Enclosure without Faceplate	P/N for Enclosure Preloaded with Faceplate <sup>(2),(3),(4)</sup>
1U	Horizontal	1	S2A	2-slot	Size-A: 32 x 155	24F	24F	48F	D01	D01-02-Axxxx
1U	Horizontal	1	S3B	3-slot	Size-B: 32 x 120	N/A	N/A	72F	D02	D02-03-Bxxxx
2U	Horizontal	1	S4A	4-slot	Size-A: 32 x 155	48F	48F	48F	D03	D03-04-Axxxx
2U	Horizontal	1	S6B	6-slot	Size-B: 32 x 120	48F	48F	48F	D04	D04-06-Bxxxx
2U	Horizontal	2	S2A	4-slot	Size-A: 32 x 155	48F	48F	48F	D05	D05-04-Axxxx
2U	Horizontal	2	S3B	6-slot	Size-B: 32 x 120	48F	48F	48F	D06	D06-06-Bxxxx
4U	Horizontal	2	S4A	8-slot	Size-A: 32 x 155	96F	96F	96F	D07	D07-08-Axxxx
4U	Horizontal	2	S6B	12-slot	Size-B: 32 x 120	96F	144F	144F	D08	D08-12-Bxxxx
4U	Horizontal	4	S2A	8-slot	Size-A: 32 x 155	96F	96F	96F	D09	D09-08-Axxxx
4U	Horizontal	4	S3B	12-slot	Size-B: 32 x 120	96F	144F	144F	D10	D10-12-Bxxxx

(1) Turn to Page 69 for Drawers details

(2) Part Nos. highlighted as Axxxx, Bxxxx refers to the selection of Rackmount Adapter Faceplate, please turn to Page 90 ~ 92 to select Part Nos. for Adapter Faceplate

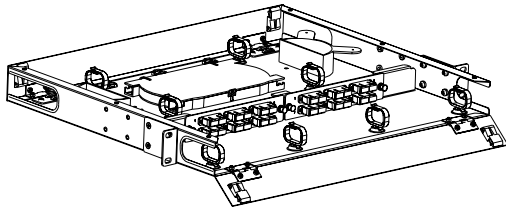
(3) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

(4) When adapter faceplates are to be ordered separately with individual Part Nos. as in Page 90 ~ 92, the adapter faceplates will be packed and shipped separately.

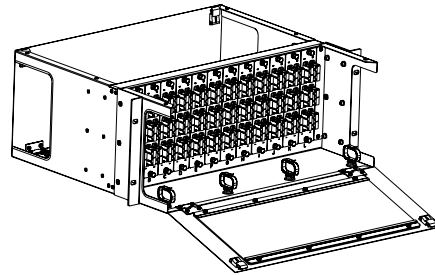
## FIXED TYPE (DESIGN WITHOUT MODULAR DRAWER)

Fixed Type Enclosure is designed to accommodate with snap-in adapter faceplates with the most convenient and economical design.

It offers in 1U (for housing 2pcs adapter faceplates), and 4U (for housing 12pcs of adapter faceplates)



1U Fixed Type Enclosure (Horizontal Style )



4U Fixed Type Enclosure (Vertical Style )

Item Description				Max. Fiber Capacity Per Enclosure			Part No.	
Rack Unit	Panel Style	Total No. of Faceplate Slot per Enclosure	Size of Faceplate Slot (H x W in mm)	FC/ST	SC	LC	P/N for Enclosure without Faceplate	P/N for Enclosure Preloaded with Faceplate <sup>(1),(2),(3)</sup>
1U	Horizontal	2	Size-A: 32 x 155	24F	24F	24F	F01	F01-02-Axxxx
4U	Vertical	12	Size-A: 32 x 155	144F	144F	N/A	F02	F02-12-Axxxx
4U	Vertical	12	Size-B: 32 x 120	72F	144F	144F	F03	F03-12-Bxxxx

(1) Part Nos. highlighted as Axxxx, Bxxxx refers to the selection of Rackmount Adapter Faceplate, please turn to Page 90 ~ 92 to select Part Nos. for Adapter Faceplate

(2) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

(3) When adapter faceplates are to be ordered separately with individual Part Nos. as in Page 90 ~ 92, the adapter faceplates will be packed and shipped separately.



# D380 - 1U, 2U, 4U PATCHING ENCLOSURE

380mm depth rack-mountable enclosure in 1U, 2U or 4U designed for supporting direct patching.

Compatible with 19" EIA standard cabinets and rack system, the enclosure is offered with the options of modular Drawer Type or Fixed Type that pre-installed with fiber management spools and snap-in adapter faceplates (optional) with selection of different interfaces and fiber modes.



## KEY FEATURES :

- Offered in 1U, 2U or 4U with choices of Drawer Type and Fixed Type
- Accommodate with fiber management spools
- Re-lockable front plate with hinges
- Adjustable rackmount ears
- Modular drawer (Drawer Type) can be removed completely from the enclosure
- Inter-changeable drawers (Drawer Type) support easy reconfiguration
- Transparent front plate (for 4U)

## Specifications

<b>Main Material</b>	Standard offer : Steel Option of Aluminium on request
<b>Dimension</b>	1U x 435mm x 380mm
<b>Height (U) x Width (W) x</b>	2U x 435mm x 380mm
<b>Depth (D)</b>	4U x 435mm x 380mm
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Available Fiber Modes</b>	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA-310
<b>Preloaded Units</b>	Fiber Management Spools Adjustable Rackmount Ears, 70mm from the front plate (x 2pcs) Modular Drawer (For Drawer Type Only) Snap-in Adapter Faceplates (Optional items to order seperately, refer to Page 90 ~ 92)

# D380 - 1U, 2U, 4U PATCHING ENCLOSURE

## DRAWER TYPE

All Drawer Type Enclosures are designed to accommodate with modular sliding drawer for allowing easy reconfiguration for moves, adds and changes. They are offered with options of 1U, 2U or 4U.

The sliding drawers for this splicing enclosure are offered in either 1U (for housing 2 or 3pcs adapter faceplates), or 2U (for housing 4 or 6pcs adapter faceplates)

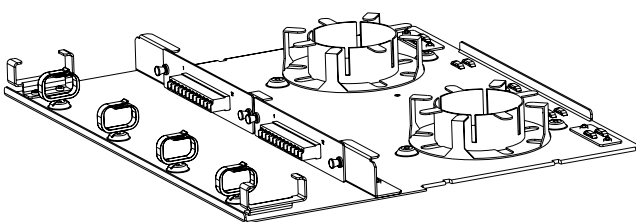


Example of Drawer Type Patching Enclosure in 2U, preloaded with 2pcs of P2A Drawer, 4-slot, 24F, SC Blue Adapter  
P/N: D15-04-A206B

### Types of Modular Drawer

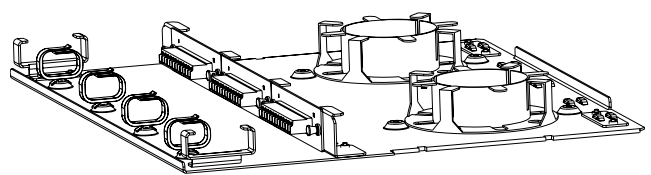
4 options of patching drawers can be flexibly bundled with either 1U height with 2- or 3-slot, and 2U height with 4- or 6-slot.

Drawer Style: P2A



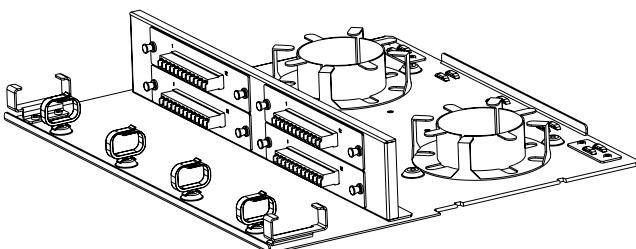
Patching drawer of 1U Height with 2-slot  
Use to house 2pcs of Size-A Faceplate (refer to Page 90)

Drawer Style: P3B



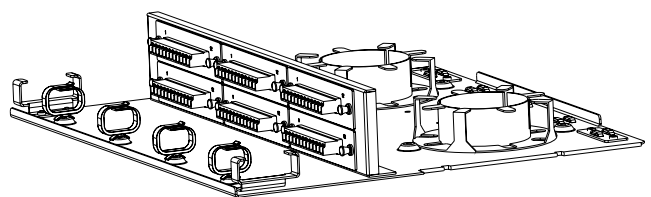
Patching drawer of 1U Height with 3-slot  
Use to house 3pcs of Size-B Faceplate (refer to Page 90)

Drawer Style: P4A



Patching drawer of 2U Height with 4-slot  
Use to house 4pcs of Size-A Faceplate (refer to Page 90)

Drawer Style: P6B



Patching drawer of 2U Height with 6-slot  
Use to house 6pcs of Size-B Faceplate (refer to Page 90)

# D380 - 1U, 2U, 4U PATCHING ENCLOSURE

## DRAWER TYPE

Item Description						Max. Fiber Capacity Per Enclosure			Part No.	
Rack Unit	Faceplate Slot Orientation	No. of Drawer Preloaded	Types of Drawer Preloaded <sup>(1)</sup>	Total No. of Faceplate Slot per Enclosure	Suitable Faceplate Size (H x W in mm)	FC/ST	SC	LC	P/N for Enclosure without Faceplate	P/N for Enclosure Preloaded with Faceplate <sup>(2), (3), (4)</sup>
1U	Horizontal	1	P2A	2-slot	Size-A: 32 x 155	24F	24F	48F	D11	D11-02-Axxxx
1U	Horizontal	1	P3B	3-slot	Size-B: 32 x 120	N/A	N/A	72F	D12	D12-03-Bxxxx
2U	Horizontal	1	P4A	4-slot	Size-A: 32 x 155	48F	48F	48F	D13	D13-04-Axxxx
2U	Horizontal	1	P6B	6-slot	Size-B: 32 x 120	48F	48F	48F	D14	D14-06-Bxxxx
2U	Horizontal	2	P2A	4-slot	Size-A: 32 x 155	48F	48F	48F	D15	D15-04-Axxxx
2U	Horizontal	2	P3B	6-slot	Size-B: 32 x 120	48F	48F	48F	D16	D16-06-Bxxxx
4U	Horizontal	2	P4A	8-slot	Size-A: 32 x 155	96F	96F	96F	D17	D17-08-Axxxx
4U	Horizontal	2	P6B	12-slot	Size-B: 32 x 120	96F	144F	144F	D18	D18-12-Bxxxx
4U	Horizontal	4	P2A	8-slot	Size-A: 32 x 155	96F	96F	96F	D19	D19-08-Axxxx
4U	Horizontal	4	P3B	12-slot	Size-B: 32 x 120	96F	144F	144F	D20	D20-12-Bxxxx

(1) Turn to Page 72 for Drawers details

(2) Part Nos. highlighted as Axxxx, Bxxxx refers to the selection of Rackmount Adapter Faceplate, please turn to Page 90 ~ 92 to select Part Nos. for Adapter Faceplate

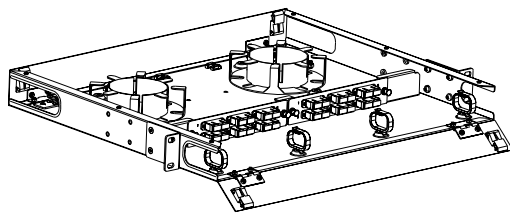
(3) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

(4) When adapter faceplates are to be ordered separately with individual Part Nos. as in Page 90 ~ 92, the adapter faceplates will be packed and shipped separately.

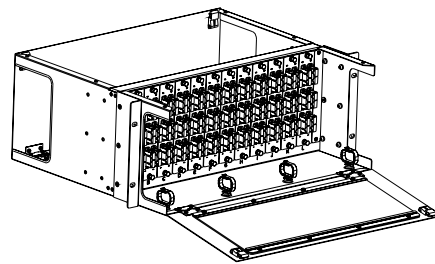
## FIXED TYPE (DESIGN WITHOUT MODULAR DRAWER)

Fixed Type Enclosure is designed to accommodate with snap-in adapter faceplates with the most convenient and economical design.

It offers in 1U (for housing 2pcs adapter faceplates), and 4U (for housing 12pcs of adapter faceplates)



1U Fixed Type Enclosure (Horizontal Style)



4U Fixed Type Enclosure (Vertical Style)

Item Description				Max. Fiber Capacity Per Enclosure			Part No.	
Rack Unit	Panel Style	Total No. of Faceplate Slot per Enclosure	Size of Faceplate Slot (H x W in mm)	FC/ST	SC	LC	P/N for Enclosure without Faceplate	P/N for Enclosure Preloaded with Faceplate <sup>(1), (2), (3)</sup>
1U	Horizontal	2	Size-A: 32 x 155	24F	24F	24F	F04	F04-02-Axxxx
4U	Vertical	12	Size-A: 32 x 155	144F	144F	N/A	F05	F05-12-Axxxx
4U	Vertical	12	Size-B: 32 x 120	72F	144F	144F	F06	F06-12-Bxxxx

(1) Part Nos. highlighted as Axxxx, Bxxxx refers to the selection of Rackmount Adapter Faceplate, please turn to Page 90 ~ 92 to select Part Nos. for Adapter Faceplate

(2) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

(3) When adapter faceplates are to be ordered separately with individual Part Nos. as in Page 90 ~ 92, the adapter faceplates will be packed and shipped separately.

# D240 - 1U ENCLOSURE FOR SPLICING/ PATCHING

240mm depth rack-mountable enclosure in 1U design for the installation environment with space constraint.

Available for both splicing and patching application and compatible with 19" EIA standard cabinets and rack system.

The enclosure is designed with a pull-out tray that preloaded with specified adapters on the front panel, offered in 24- or 48-Fiber with splicing/patching accessories, and customer specified adapter type.



## KEY FEATURES :

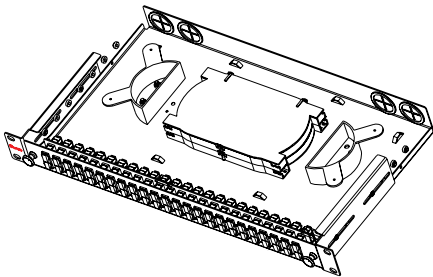
- Slim design with 240mm depth, suitable for space constrained environment
- Pull-out drawer preloaded with customer specified adapters on front panel
- Available for patching or splicing options
- Choices of FC, SC, ST or LC adapters with different fiber modes
- Preloaded with adjustable rackmount ears
- Economical and easy to handle

## Specifications

<b>Main Material</b>	Standard offer : Steel Option of Aluminium on request
<b>Dimension</b> Height (U) x Width (W) x Depth (D)	1U x 435mm x 240mm
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA-310
<b>Preloaded Units</b>	Pull-out Tray Preloaded with Specified Adapters Splicing Kits (For Splicing Enclosure Only) Cable Management Spools Adjustable Rackmount Ears, 70mm from the front plate (x 2pcs)

# D240 - 1U ENCLOSURE FOR SPLICING/ PATCHING

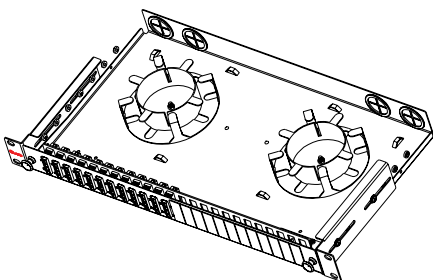
## FOR SPLICING USE



Example of D240,  
SC, 48-Fiber, Splicing, OM3  
P/N: R240S1G-2CM3

Item Description			Part No.	
Adapter Interface	Fiber Mode	Adapter Color	24-Fiber Option	48-Fiber Option
FC	OS1/OS2	Metallic	R240S1G-1BSU	R240S1G-1CSU
	OM1	Metallic	R240S1G-1BM1	R240S1G-1CM1
	OM2	Metallic	R240S1G-1BM2	R240S1G-1CM2
SC	OS1/OS2 (APC)	Green	N/A	R240S1G-2CSA
	OS1/OS2	Blue	N/A	R240S1G-2CSU
	OM1	Beige	N/A	R240S1G-2CM1
	OM2	Beige	N/A	R240S1G-2CM2
	OM3	Aqua	N/A	R240S1G-2CM3
ST	OS1/OS2	Metallic	R240S1G-3BSU	R240S1G-3CSU
	OM1	Metallic	R240S1G-3BM1	R240S1G-3CM1
	OM2	Metallic	R240S1G-3BM2	R240S1G-3CM2
LC	OS1/OS2 (APC)	Green	N/A	R240S1G-4CSA
	OS1/OS2	Blue	N/A	R240S1G-4CSU
	OM1	Beige	N/A	R240S1G-4CM1
	OM2	Beige	N/A	R240S1G-4CM2
	OM3	Aqua	N/A	R240S1G-4CM3
	OM4	Aqua	N/A	R240S1G-4CM4

## FOR PATCHING USE



Example of D240,  
LC, 48-Fiber, Patching, OM2  
P/N: R240P1G-4CM2

Item Description			Part No.	
Adapter Interface	Fiber Mode	Adapter Color	24-Fiber Option	48-Fiber Option
FC	OS1/OS2	Metallic	R240P1G-1BSU	R240P1G-1CSU
	OM1	Metallic	R240P1G-1BM1	R240P1G-1CM1
	OM2	Metallic	R240P1G-1BM2	R240P1G-1CM2
SC	OS1/OS2 (APC)	Green	N/A	R240P1G-2CSA
	OS1/OS2	Blue	N/A	R240P1G-2CSU
	OM1	Beige	N/A	R240P1G-2CM1
	OM2	Beige	N/A	R240P1G-2CM2
	OM3	Aqua	N/A	R240P1G-2CM3
ST	OS1/OS2	Metallic	R240P1G-3BSU	R240P1G-3CSU
	OM1	Metallic	R240P1G-3BM1	R240P1G-3CM1
	OM2	Metallic	R240P1G-3BM2	R240P1G-3CM2
LC	OS1/OS2 (APC)	Green	N/A	R240P1G-4CSA
	OS1/OS2	Blue	N/A	R240P1G-4CSU
	OM1	Beige	N/A	R240P1G-4CM1
	OM2	Beige	N/A	R240P1G-4CM2
	OM3	Aqua	N/A	R240P1G-4CM3
	OM4	Aqua	N/A	R240P1G-4CM4

# D200 - 1U ENCLOSURE FOR SPLICING/ PATCHING

200mm depth rack-mountable enclosure in 1U design for the installation environment where tight space constraints exists.

Available for both splicing and patching application and compatible with 19" EIA standard cabinets and rack system.

The enclosure is designed with a pull-out tray that preloaded with specified adapters on the front panel, offered in 24- or 48-Fiber with splicing/patching accessories, and customer specified adapter type.



## KEY FEATURES :

- Slim design with 200mm depth, especially suitable for tight space environment
- Pull-out tray preloaded with customer specified adapters on front panel
- Available for patching or splicing options
- Choices of FC, SC, ST or LC adapters with different fiber modes
- Preloaded with adjustable rackmount ears
- Economical and easy to handle

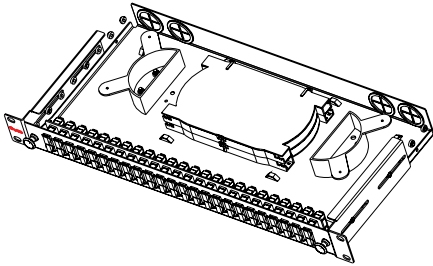
## Specifications

<b>Main Material</b>	Standard offer : Steel Option of Aluminium on request
<b>Dimension</b> <b>Height (U) x Width (W) x Depth (D)</b>	1U x 435mm x 200mm
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA-310
<b>Preloaded Units</b>	Pull-out Tray Preloaded with Specified Adapters Splicing Kits (For Splicing Enclosure Only) Cable Management Spools Adjustable Rackmount Ears, 70mm from the front plate (x 2pcs)



# D200 - 1U ENCLOSURE FOR SPLICING/ PATCHING

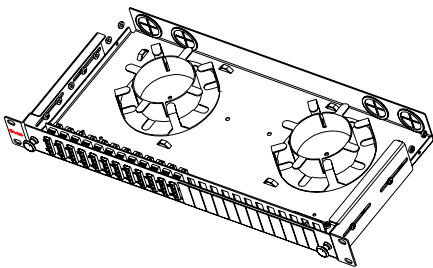
## FOR SPLICING USE



Example of D200,  
SC, 48-Fiber, Splicing, OM3  
P/N: R200S1G-2CM3

Item Description			Part No.	
Adapter Interface	Fiber Mode	Adapter Color	24-Fiber Option	48-Fiber Option
FC	OS1/OS2	Metallic	R200S1G-1BSU	R200S1G-1CSU
	OM1	Metallic	R200S1G-1BM1	R200S1G-1CM1
	OM2	Metallic	R200S1G-1BM2	R200S1G-1CM2
SC	OS1/OS2 (APC)	Green	N/A	R200S1G-2CSA
	OS1/OS2	Blue	N/A	R200S1G-2CSU
	OM1	Beige	N/A	R200S1G-2CM1
	OM2	Beige	N/A	R200S1G-2CM2
	OM3	Aqua	N/A	R200S1G-2CM3
ST	OS1/OS2	Metallic	R200S1G-3BSU	R200S1G-3CSU
	OM1	Metallic	R200S1G-3BM1	R200S1G-3CM1
	OM2	Metallic	R200S1G-3BM2	R200S1G-3CM2
LC	OS1/OS2 (APC)	Green	N/A	R200S1G-4CSA
	OS1/OS2	Blue	N/A	R200S1G-4CSU
	OM1	Beige	N/A	R200S1G-4CM1
	OM2	Beige	N/A	R200S1G-4CM2
	OM3	Aqua	N/A	R200S1G-4CM3
	OM4	Aqua	N/A	R200S1G-4CM4

## FOR PATCHING USE



Example of D200,  
LC, 48-Fiber, Patching, OM2  
P/N: R200P1G-4CM2

Item Description			Part No.	
Adapter Interface	Fiber Mode	Adapter Color	24-Fiber Option	48-Fiber Option
FC	OS1/OS2	Metallic	R200P1G-1BSU	R200P1G-1CSU
	OM1	Metallic	R200P1G-1BM1	R200P1G-1CM1
	OM2	Metallic	R200P1G-1BM2	R200P1G-1CM2
SC	OS1/OS2 (APC)	Green	N/A	R200P1G-2CSA
	OS1/OS2	Blue	N/A	R200P1G-2CSU
	OM1	Beige	N/A	R200P1G-2CM1
	OM2	Beige	N/A	R200P1G-2CM2
	OM3	Aqua	N/A	R200P1G-2CM3
ST	OS1/OS2	Metallic	R200P1G-3BSU	R200P1G-3CSU
	OM1	Metallic	R200P1G-3BM1	R200P1G-3CM1
	OM2	Metallic	R200P1G-3BM2	R200P1G-3CM2
LC	OS1/OS2 (APC)	Green	N/A	R200P1G-4CSA
	OS1/OS2	Blue	N/A	R200P1G-4CSU
	OM1	Beige	N/A	R200P1G-4CM1
	OM2	Beige	N/A	R200P1G-4CM2
	OM3	Aqua	N/A	R200P1G-4CM3
	OM4	Aqua	N/A	R200P1G-4CM4

# D200 - 1U ENCLOSURE WITH CABLE MANAGEMENT RINGS FOR SPLICING/PATCHING

200mm depth rack-mountable enclosure in 1U design, with 2 cable management rings extended from the front panel.

Available for both splicing and patching application and compatible with 19" EIA standard cabinets and rack system.

Snap-in faceplates can be flexibly bundled with customer specified adapter types allowing easy reconfiguration.



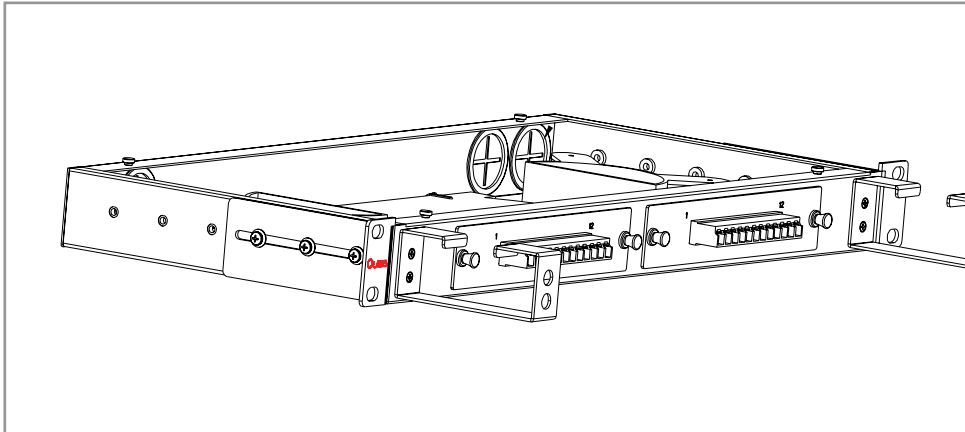
## KEY FEATURES :

- Designed with 2 cable management rings at the front for easy cable management
- Flexibly house with snap-in adapter faceplates allows easy reconfigurations
- Available for patching or splicing application
- Adjustable rackmount ears
- Cable Management Rings feature better cable bending management
- Suitable for house with 2pcs of Size-A Adapter Faceplate (refer to Page 90)

## Specifications

<b>Main Material</b>	Standard offer : Steel Option of Aluminium on request
<b>Dimension</b> <b>Height (U) x Width (W) x Depth (D)</b>	1U x 435mm x 200mm
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA-310
<b>Preloaded Units</b>	Splicing Kits (For Splicing Enclosure Only) Cable Management Spools Adjustable Rackmount Ears, 70mm from the front plate (x 2pcs) Snap-in Adapter Faceplates (Optional items to order seperately, refer to Page 90 ~ 92)

# D200 - 1U ENCLOSURE WITH CABLE MANAGEMENT RINGS FOR SPLICING/PATCHING



Item Description				Max. Fiber Capacity Per Enclosure			Part No.	
Rack Unit	Application	Total No. of Faceplate Slot per Enclosure	Suitable Faceplate Size (H x W in mm)	FC/ST	SC	LC	P/N for Enclosure without Faceplate	P/N for Enclosure Preloaded with Faceplate <sup>(1), (2), (3)</sup>
1U	Splicing	2-slot	Size-A: 32 x 155	24F	24F	48F	C01	C01-02-Axxxx
1U	Patching	2-slot	Size-A: 32 x 155	24F	24F	48F	C02	C02-02-Axxxx

[1] Part Nos. highlighted as Axxxx refers to the selection of Rackmount Adapter Faceplate, please turn to Page 90 ~ 92 to select Part Nos. for Adapter Faceplate  
 [2] When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.  
 [3] When adapter faceplates are to be ordered separately with individual Part Nos. as in Page 90 ~ 92, the adapter faceplates will be packed and shipped separately.

# D380 - 1U, 2U, 4U MPO PLUG-AND-PLAY RACKMOUNT ENCLOSURES

380mm depth rack-mountable enclosure with 1U, 2U or 4U is designed for housing plug-and-play MPO to LC fiber cassette modules.

The enclosure is offered in modular Drawer Type or Fixed Type that accommodated with a plug-and-play fiber module (to be ordered separately) and pre-installed with 12- or 24-Fiber MPO based fiber assemblies, and pre-loaded with LC adapters in different fiber modes.

Compatible with all 19" EIA standard cabinets and rack system.



## KEY FEATURES :

- Choices of 1U, 2U or 4U
- Accommodate with easy snap-in MPO to LC fiber cassette
- Options of Drawer Type and Fixed Type design
- High density up to 384-Fiber for 4U
- Re-lockable front plate with hinges
- Adjustable rackmount ears
- Modular drawer (Drawer Type) can be removed completely from the panel
- Inter-changeable drawers (Drawer Type) support easy reconfiguration
- Transparent front plate (for 4U model)

## Specifications

<b>Main Material</b>	Regular offer : Steel Option of Aluminum upon request
<b>Dimension</b>	1U x 435mm x 380mm
<b>Height (U) x Width (W) x Depth (D)</b>	2U x 435mm x 380mm 4U x 435mm x 380mm
<b>Available Interfaces</b>	MPO to LC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS
<b>Preloaded Units</b>	Modular Drawer (For Drawer Type Only) MPO-LC Cassette (Optional)

# D380 - 1U, 2U, 4U MPO PLUG-AND-PLAY RACKMOUNT ENCLOSURES

## DRAWER TYPE

All Drawer Type Enclosures could accommodate with modular sliding drawer which allow easy reconfiguration for moves, adds and changes. They are offered with options of 1U, 2U or 4U.

The sliding drawers are of 1U height which can house either 3pcs or 4pcs of fiber cassettes.



Example of Drawer Type Enclosure in 4U, preloaded with 4pcs of M3A-Drawer

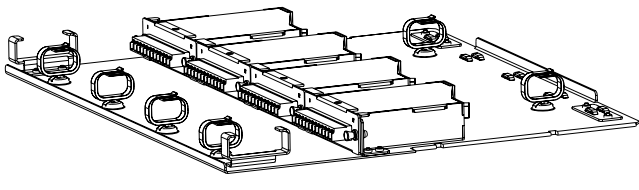
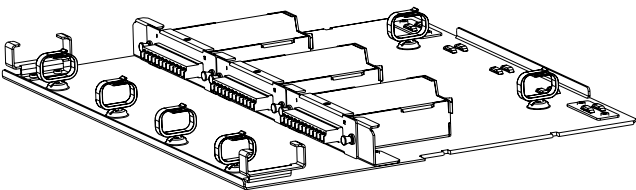
### Types of Modular Drawer

The Drawer Type rackmount enclosure can flexibly bundle with 2 options of drawers with either 3-slot or 4-slot, both of them are of 1U height that accommodates 3pcs of Size-A cassette, or 4pcs of Size-B cassette.

Please refer to Page 84 for purchasing the cassette separately.

**Drawer Style: M3A-Drawer**  
Drawer of 1U Height with 3-slot

**Drawer Style: M4B-Drawer**  
Drawer of 1U Height with 4-slot



Plug-and-play drawer use to house 3pcs of Size-A Cassette (refer to Page 84)

Plug-and-play drawer use to house 4pcs of Size-B Cassette (refer to Page 86)

# D380 - 1U, 2U, 4U MPO PLUG-AND-PLAY RACKMOUNT ENCLOSURES

## DRAWER TYPE

Item Description						Max. Fiber Capacity Per Enclosure		Part No.	
Rack Type	Cassette Slot Orientation	No. of Drawer per Enclosure	Type of Drawer Preloaded <sup>(1)</sup>	Total Nos. of Cassette Slot per Enclosure	Accommodate Cassette Size (H x W x D in mm)	To house MPO-LC 1x12F cassette	To house MPO-LC 2x12F or 1x24F cassette	P/N for Enclosure without Cassette	P/N for Enclosure Preloaded with MPO-LC Cassette <sup>(2),(3),(4)</sup>
1U	Horizontal	1	M3A	3	Size-A: 32 x 120 x 116	36F	72F	D21	D21-03-PMAxxxD
1U	Horizontal	1	M4B	4	Size-B: 32 x 102 x 116	48F	96F	D22	D22-04-PMBxxxD
2U	Horizontal	2	M3A	6	Size-A: 32 x 120 x 116	72F	144F	D23	D23-06-PMAxxxD
2U	Horizontal	2	M4B	8	Size-B: 32 x 102 x 116	96F	192F	D24	D24-08-PMBxxxD
4U	Horizontal	4	M3A	12	Size-A: 32 x 120 x 116	144F	288F	D25	D25-12-PMAxxxD
4U	Horizontal	4	M4B	16	Size-B: 32 x 102 x 116	192F	384F	D26	D26-16-PMBxxxD

[1] Turn to Page 81 for Drawers details

[2] Part Nos. highlighted as PMAxxxD, PMBxxxD refers to the selection of MPO-LC cassette, please turn to Page 84 ~ 86 to select Part Nos. for MPO-LC cassette

[3] When cassettes are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

[4] When cassettes are to be ordered separately with individual Part Nos. as in Page 84 ~ 86, the cassettes will be packed and shipped separately.

## FIXED TYPE (DESIGN WITHOUT MODULAR DRAWER)

Fixed Type Enclosure is designed to accommodate maximum 12pcs of MPO to LC fiber cassette in an vertical cassette orientation.

Only 4U is offered in this series, you can select cassettes with 2 sizes to allow flexibility on interchanging with Drawer Type enclosure where needed.



Example of Fixed Type Enclosure in 4U, Preloaded with 12pcs of Cassettes

Item Description				Max. Fiber Capacity Per Enclosure		Part No.	
Rack Type	Cassette Slot Orientation	Total Nos. of Cassette Slot per Enclosure	Accommodate Cassette Size (H x W x D in mm)	To house MPO-LC 1x12F cassette	To house MPO-LC 2x12F or 1x24F cassette	P/N for Enclosure without Cassette	P/N for Enclosure Preloaded with MPO-LC Cassette <sup>(1),(2),(3)</sup>
4U Fixed Type-A	Vertical	12	Size-A: 32 x 120 x 116	144F	288F	F04	F04-12-PMAxxxD
4U Fixed Type-B	Vertical	12	Size-B: 32 x 102 x 116	144F	288F	F05	F05-12-PMBxxxD

[1] Part Nos. highlighted as PMAxxxD, PMBxxxD refers to the selection of MPO-LC cassette, please turn to Page 84 ~ 86 to select Part Nos. for MPO-LC cassette

[2] When cassettes are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

[3] When cassettes are to be ordered separately with individual Part Nos. as in Page 84 ~ 86, the cassettes will be packed and shipped separately.

# MPO CASSETTE MODULES

MPO Cassette Module with 2 sizes in option. Preloaded with 12- or 24-Fiber MPO to LC hydra assemblies and LC adapters of customer specified fiber mode.

By integrating with Olabs' Plug-and-Play rackmount enclosure, this snap-in modularized MPO cassette offers seamless plug-and-play solution that improves cable manageability and supports quick installation.



## KEY FEATURES :

- For integrating with Olabs Plug-and-Play Rackmount Enclosure
- Pre-loaded with MPO-Male to LC hydra assemblies and adapters on front and rear
- 12- or 24-Fiber count for options
- Installer friendly snap-in modular cassette design
- Reduce labour cost by eliminating field terminations
- Pre-installed with factory-terminated MPO to LC hydra assembly

## Specifications

<b>Main Material</b>	Aluminum
<b>Dimension</b>	Size-A : 32mm x 120mm x 116mm
<b>Height (H) x Width (W) x Depth (D)</b>	Size-B : 32mm x 102mm x 116mm
<b>Available Interface</b>	MPO to LC
<b>Fiber Count per Cassette</b>	12-Fiber [preloaded with 1x12F MPO-Male assembly] 24-Fiber [preloaded with 1x24F or 2x12F MPO-Male assembly]
<b>Available Fiber Modes</b>	Singlemode [OS 1/2] Multimode [OM1, OM2, OM3, OM4]
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA/ECA-310
<b>Preloaded Units</b>	MPO-Male hydra assemblies LC Adapter [in the front] MPO Adapter [at the rear] Channel Label and Data Label [printed on front and rear]

## Optical Performance

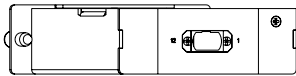
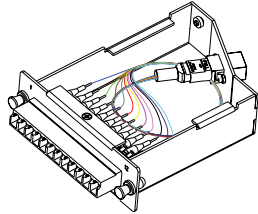
<b>MPO</b>	Singlemode	IL ≤ 0.75dB, RL ≥ 50dB
	Multimode 50/125	IL ≤ 0.35dB, RL ≥ 25dB
<b>LC</b>	Singlemode	IL ≤ 0.30dB, RL ≥ 50dB
	Multimode 50/125	IL ≤ 0.30dB, RL ≥ 23dB



# MPO CASSETTE MODULES

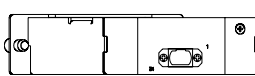
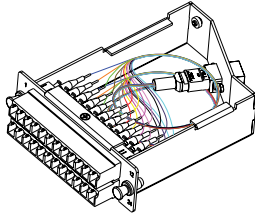
THE CASSETTE IS PRELOADED WITH MPO-MALE TO LC ASSEMBLIES, 3 FORMS OF MPO INTERFACE IS AVAILABLE FOR OPTIONS :

12-Fiber Cassette with 1x12F MPO interface



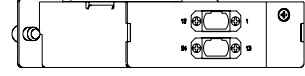
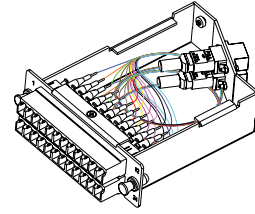
Preloaded with:  
 1x12F MPO-Male to 12xLC hydra Assembly  
 12-port of LC Adapters at front  
 1pc of MPO Adapter at rear

24-Fiber Cassette with 1x24F MPO interface



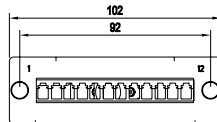
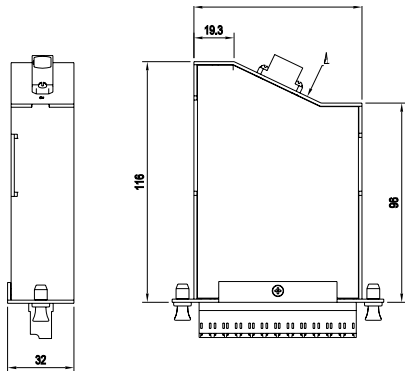
Preloaded with:  
 1x24F MPO-Male to 24xLC hydra Assembly  
 24-port of LC Adapter at front  
 1pc of MPO Adapters at rear

24-Fiber Cassette with 2x12F MPO interface



Preloaded with:  
 2pcs of 1x12F MPO-Male to 12xLC hydra Assembly  
 24-port of LC Adapter at front  
 2pcs of MPO Adapters at rear

## SIZE-A CASSETTE



32(H) x 120(W) x 116(D) mm, this cassette is designed to fit into 3-slot Drawer (M3A-Drawer<sup>[1]</sup>), or to fit into 12-slot 4U Fixed Type-A PPM enclosure<sup>[2]</sup>.

[1] M3A-Drawer refers to Page 81

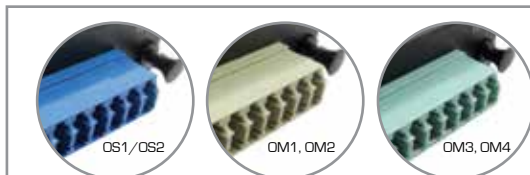
[2] 12-slot 4U Fixed Type-A PPM enclosure refers to Page 82

12-Fiber Cassette with 1x12F MPO interface



Item Description					Part No.
Fiber Count	Fiber Mode	Adapter Color on Front Panel	No. of MPO Adapter at the Rear		
12	OS1/OS2	Blue	1 (1 x 12F MPO)		PMA1SUD
12	OM1	Beige	1 (1 x 12F MPO)		PMA1M1D
12	OM2	Beige	1 (1 x 12F MPO)		PMA1M2D
12	OM3	Aqua	1 (1 x 12F MPO)		PMA1M3D
12	OM4	Aqua	1 (1 x 12F MPO)		PMA1M4D

CASSETTE FRONT



CASSETTE REAR



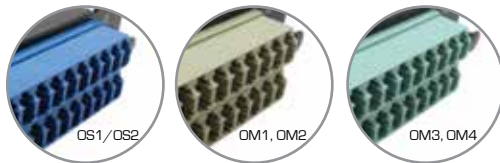
# MPO CASSETTE MODULES

24-Fiber Cassette with 1x24F MPO interface



Item Description				
Fiber Count	Fiber Mode	Adapter Color on Front Panel	No. of MPO Adapter at the Rear	Part No.
24	OS1/OS2	Blue	1 [1 x 24F MPO]	PMA2SUD
24	OM1	Beige	1 [1 x 24F MPO]	PMA2M1D
24	OM2	Beige	1 [1 x 24F MPO]	PMA2M2D
24	OM3	Aqua	1 [1 x 24F MPO]	PMA2M3D
24	OM4	Aqua	1 [1 x 24F MPO]	PMA2M4D

CASSETTE FRONT



CASSETTE REAR



24-Fiber Cassette with 2x12F MPO interface



Item Description				
Fiber Count	Fiber Mode	Adapter Color on Front Panel	No. of MPO Adapter at the Rear	Part No.
24	OS1/OS2	Blue	2 [2 x 12F MPO]	PMA3SUD
24	OM1	Beige	2 [2 x 12F MPO]	PMA3M1D
24	OM2	Beige	2 [2 x 12F MPO]	PMA3M2D
24	OM3	Aqua	2 [2 x 12F MPO]	PMA3M3D
24	OM4	Aqua	2 [2 x 12F MPO]	PMA3M4D

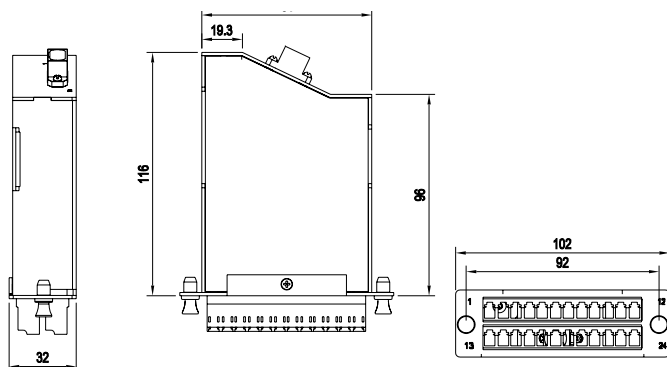
CASSETTE FRONT



CASSETTE REAR



SIZE-B CASSETTE



32(H) x 102(W) x 116(D) mm, this cassette is designed to fit into 4-slot Drawer (M4B-Drawer)<sup>(1)</sup>, or to fit into 12-slot 4U Fixed Type-B PPM enclosure<sup>(2)</sup>.

(1) M4B-Drawer refers to Page 81

(2) 12-slot 4U Fixed Type-B PPM enclosure refers to Page 82

# MPO CASSETTE MODULES

## SIZE-B CASSETTE

12-Fiber Cassette with 1x12F MPO interface



CASSETTE FRONT



Item Description					Part No.
Fiber Count	Fiber Mode	Adapter Color on Front Panel	No. of MPO Adapter at the Rear		
12	OS1/OS2	Blue	1 [1 x 12F MPO]	PMB1SUD	
12	OM1	Beige	1 [1 x 12F MPO]	PMB1M1D	
12	OM2	Beige	1 [1 x 12F MPO]	PMB1M2D	
12	OM3	Aqua	1 [1 x 12F MPO]	PMB1M3D	
12	OM4	Aqua	1 [1 x 12F MPO]	PMB1M4D	

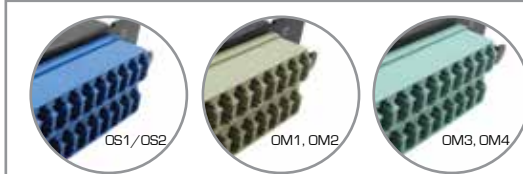
CASSETTE REAR



24-Fiber Cassette with 1x24F MPO interface



CASSETTE FRONT



Item Description					Part No.
Fiber Count	Fiber Mode	Adapter Color on Front Panel	No. of MPO Adapter at the Rear		
24	OS1/OS2	Blue	1 [1 x 24F MPO]	PMB2SUD	
24	OM1	Beige	1 [1 x 24F MPO]	PMB2M1D	
24	OM2	Beige	1 [1 x 24F MPO]	PMB2M2D	
24	OM3	Aqua	1 [1 x 24F MPO]	PMB2M3D	
24	OM4	Aqua	1 [1 x 24F MPO]	PMB2M4D	

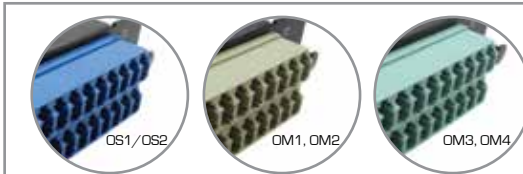
CASSETTE REAR



24-Fiber Cassette with 2x12F MPO interface



CASSETTE FRONT



Item Description					Part No.
Fiber Count	Fiber Mode	Adapter Color on Front Panel	No. of MPO Adapter at the Rear		
24	OS1/OS2	Blue	2 (2 x 12F MPO)	PMB3SUD	
24	OM1	Beige	2 (2 x 12F MPO)	PMB3M1D	
24	OM2	Beige	2 (2 x 12F MPO)	PMB3M2D	
24	OM3	Aqua	2 (2 x 12F MPO)	PMB3M3D	
24	OM4	Aqua	2 (2 x 12F MPO)	PMB3M4D	

CASSETTE REAR



# INDOOR WALLMOUNT ENCLOSURES

Indoor Wallmount Enclosure for 12-, 24-, 48-, 72-, 96- and 144-Fiber that accept interchangeable FC, SC, ST or LC Adapters.

The wallmount is offered with the options of splicing or patching applications, the splicing wallmount supplies with fiber splicing kit, the patching wallmount supplies with cable management spools.

Total 5 different sizes to fit for different installation environment and fiber capacity.



## KEY FEATURES :

- 12-, 24-, 48-, 72-, 96- and 144-Fiber capacity
- Flexibly accept FC, SC, ST or LC Adapter faceplates
- Flexible design to support patching or splicing cabling solution
- Multiple cable entrances from top or bottom
- Lockable door to restrict unauthorized access
- 2-door design enable convenient cable management
- Available with loaded pigtails and adapter faceplates upon request

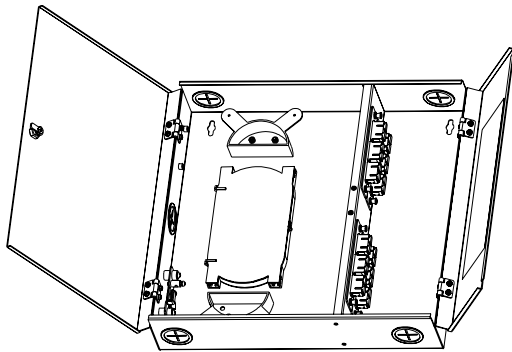
## Specifications

<b>Main Material</b>	Regular offer : Steel Option for Aluminum upon request
<b>Dimension</b> <b>Length (L) x Height (H) x Depth (D)</b>	Size-1 : 370mm x 350mm x 78mm Size-2 : 420mm x 420mm x 78mm Size-3 : 420mm x 420mm x 108mm Size-4 : 420mm x 420mm x 138mm Size-5 : 420mm x 420mm x 198mm
<b>Support Applications</b>	Patching / Splicing
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Fiber Capacity per Panel</b>	12-, 24-, 48-, 96-, 144-Fiber
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Compliance</b>	RoHS
<b>Coating and Color</b>	Beige Powder Coating
<b>Preloaded Units</b>	Fiber Management Spools Splice Tray (for Splicing Model Only) Door Lock and Key Adapter Faceplates (Optional as per Order) Fiber Pigtails (Optional, to be ordered seperately)

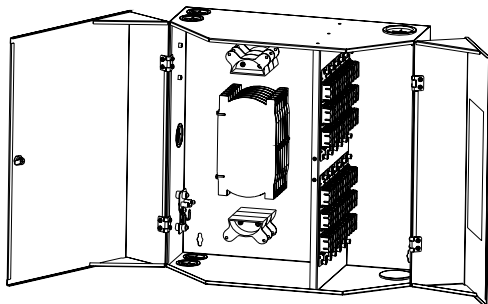
# INDOOR WALLMOUNT ENCLOSURES

## WALLMOUNT FOR SPLICING

This wallmount enclosure is designed for fiber splicing application, it supplies with splice trays and fiber spools to support convenient fiber splicing on-site, optional preloaded adapter faceplates can be preloaded to allow extra convenience.



Example of Wallmount Size-1:  
370 x 350 x 78 (WxHxD) mm  
4-slot, 24F SC Blue Adapter  
P/N: WS1-04-D206B



Example of Wallmount Size-5:  
420 x 420 x 198 (WxHxD) mm  
12-slot, 144F SC Blue Adapter  
P/N: WS5-12-C212B

FIBER ENCLOSURES

WALLMOUNT ENCLOSURES

Item Description				Max. Fiber Capacity Per Enclosure			Part No.	
Size of the Wallmount Enclosure (W x H x D) mm	Total Nos. of Faceplate Slot Per Enclosure	Accommodate Faceplate Size (H x W) mm	Nos. of Preloaded Splice Tray and Fiber Spools (Set)	House with FC/ST Faceplates	House with SC Faceplates	House with LC Faceplates	P/N for Empty Enclosure without Faceplate	P/N for Enclosure Preloaded with Adapter Faceplate <sup>(1), (2), (3)</sup>
Size-1: 370 x 350 x 78	4	Size-D: 28 x 120	1	24F	24F	48F	WS1	WS1-04-Dxxxx
Size-2: 420 x 420 x 78	4	Size-C: 28 x 155	1	48F	48F	48F	WS2	WS2-04-Cxxxx
Size-3: 420 x 420 x 108	6	Size-C: 28 x 155	2	72F	72F	72F	WS3	WS3-06-Cxxxx
Size-4: 420 x 420 x 138	8	Size-C: 28 x 155	2	96F	96F	96F	WS4	WS4-08-Cxxxx
Size-5: 420 x 420 x 198	12	Size-C: 28 x 155	4	144F	144F	144F	WS5	WS5-12-Cxxxx

(1) Part Nos. highlighted as Cxxxx, Dxxxx refers to the selection of Wallmount Adapter Faceplate, please turn to Page 93 ~ 95 to select Part Nos. for Adapter Faceplate

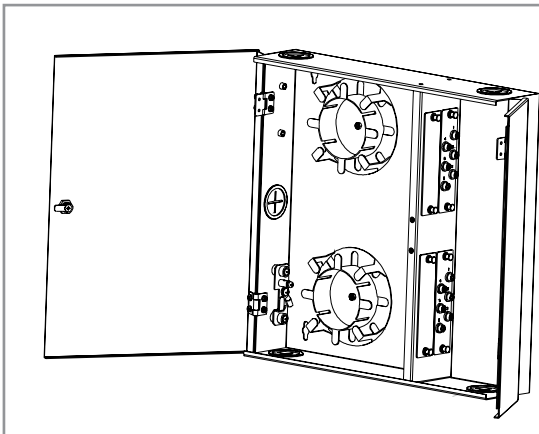
(2) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

(3) When adapter faceplates are to be ordered separately with individual Part Nos. as in Page 93 ~ 95, the adapter faceplates will be packed and shipped separately.

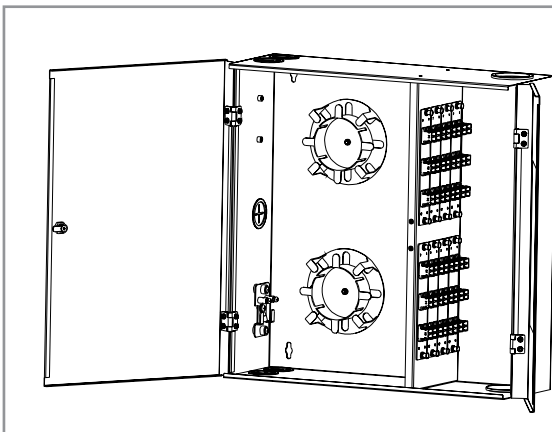
# INDOOR WALLMOUNT ENCLOSURES

## WALLMOUNT FOR PATCHING

This wallmount enclosure is designed for fiber cable patching application, it supplies with cable management spools to support convenient fiber patching, optional preloaded adapter faceplates can be preloaded to allow extra convenience.



Example of Wallmount Size-1:  
370 x 350 x 78 (WxHxD) mm  
4-slot, 12F FC Adapter  
P/N: WP1-02-D106N



Example of Wallmount Size-5:  
420 x 420 x 198 (WxHxD) mm  
8-slot, 96F LC Beige Adapter  
P/N: WP5-08-C412R

Item Description				Max. Fiber Capacity Per Enclosure			Part No.	
Size of the Wallmount Enclosure (W x H x D) mm	Total Nos. of Faceplate Slot Per Enclosure	Accommodate Faceplate Size (H x W) mm	Nos. of Preloaded Splice Tray and Fiber Spools (Set)	House with FC/ST Faceplates	House with SC Faceplates	House with LC Faceplates	P/N for Empty Enclosure without Faceplate	P/N for Enclosure Preloaded with Adapter Faceplate <sup>(1)</sup> , <sup>(2)</sup> , <sup>(3)</sup>
Size-1 : 370 x 350 x 78	4	Size-D: 28 x 120	1	24F	48F	48F	WP1	WP1-04-Dxxxx
Size-2 : 420 x 420 x 78	4	Size-C: 28 x 155	1	48F	48F	48F	WP2	WP2-04-Cxxxx
Size-3 : 420 x 420 x 108	6	Size-C: 28 x 155	2	72F	72F	72F	WP3	WP3-06-Cxxxx
Size-4 : 420 x 420 x 138	8	Size-C: 28 x 155	2	96F	96F	96F	WP4	WP4-08-Cxxxx
Size-5 : 420 x 420 x 198	12	Size-C: 28 x 155	4	144F	144F	144F	WP5	WP5-12-Cxxxx

(1) Part Nos. highlighted as Cxxxx, Dxxxx refers to the selection of Wallmount Adapter Faceplate, please turn to Page 93 ~ 95 to select Part Nos. for Adapter Faceplate

(2) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.

(3) When adapter faceplates are to be ordered separately with individual Part Nos. as in Page 93 ~ 95, the adapter faceplates will be packed and shipped separately.

# RACKMOUNT ADAPTER FACEPLATES

Adapter Faceplates compatible with Olabs Rackmount Enclosures.

Easily snap-in design with 2 sizes options and different choices of adapter interfaces.

## KEY FEATURES :

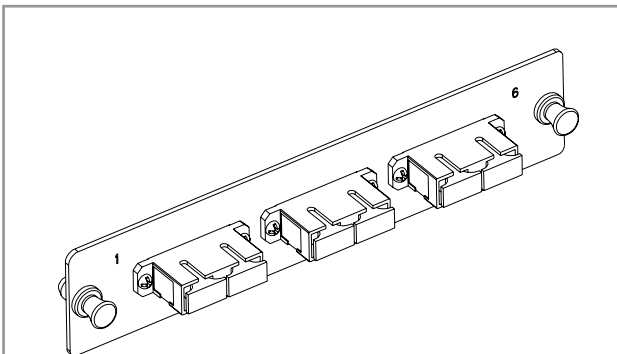
- Easily snap into Olabs rackmount enclosures
- Comprehensive range of adapter types to fit for each installation needs
- Choices of FC, SC, ST or LC with singlemode or multimode
- Interchangeable for Drawer Type or Fixed Type enclosure

## Specifications

<b>Main Material</b>	Aluminum
<b>Dimension</b>	Size A : 32mm x 155mm
<b>Height (H) x Width (W)</b>	Size B : 32mm x 120mm
<b>Snap Distance</b>	Size A : 145 mm Size B : 108 mm
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS
<b>Preloaded Units</b>	Fiber Optic Adapters Silk-printed channel numbering marks

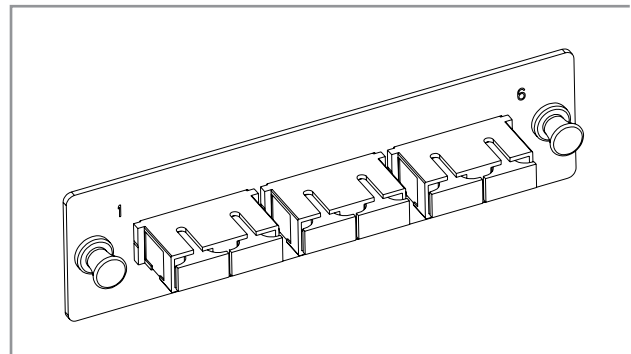
Rackmount Adapter Faceplates are offered in 2 different sizes.

**Size-A Faceplate: 32(H) x 155(W) mm**



Used to house into 2-slot Rackmount Panels for Splicing/Patching.

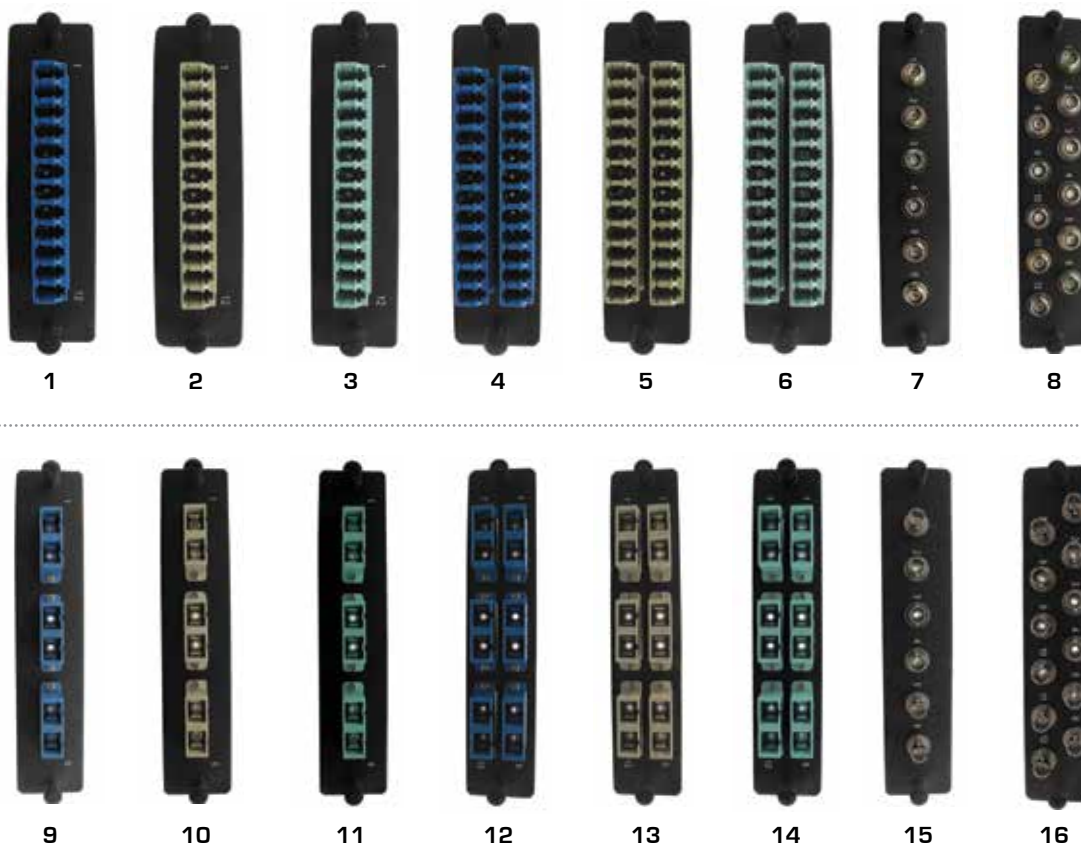
**Size-B Faceplate: 32(H) x 120(W) mm**



Used to house into 3-slot Rackmount Panels for Splicing/Patching.



# RACKMOUNT ADAPTER FACEPLATES



## LC FACEPLATE

Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-A: 32(H) x 155(H)mm	Size-B: 32(H) x 120(W)mm
1	12	Green	OS1/2 (APC)	A412G	B412G
	12	Blue	OS1/2	A412B	B412B
2	12	Beige	OM1, OM2	A412R	B412R
3	12	Aqua	OM3, OM4	A412A	B412A
4	24	Green	OS1/2 (APC)	A424G	B424G
	24	Blue	OS1/2	A424B	B424B
5	24	Beige	OM1, OM	A424R	B424R
6	24	Aqua	OM3, OM4	A424A	B424A

# RACKMOUNT ADAPTER FACEPLATES

## FC FACEPLATE

Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-A: 32(H) x 155(H)mm	Size-B: 32(H) x 120(W)mm
7	6	Metallic	Suitable for all modes	A106N	B106N
8	12	Metallic	Suitable for all modes	A112N	N/A

## SC FACEPLATE

Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-A: 32(H) x 155(H)mm	Size-B: 32(H) x 120(W)mm
9	6	Green	OS1/2 (APC)	A206G	B206G
	6	Blue	OS1/2	A206B	B206B
10	6	Beige	OM1, OM2	A206R	B206R
11	6	Aqua	OM3, OM4	A206A	B206A
12	12	Green	OS1/2 (APC)	A212G	B212G
	12	Blue	OS1/2	A212B	B212B
13	12	Beige	OM1, OM2	A212R	B212R
14	12	Aqua	OM3, OM4	A212A	B212A

## ST FACEPLATE

Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-A: 32(H) x 155(H)mm	Size-B: 32(H) x 120(W)mm
15	6	Metallic	Suitable for all modes	A306N	B306N
16	12	Metallic	Suitable for all modes	A312N	N/A

# WALLMOUNT ADAPTER FACEPLATES

Adapter Faceplates compatible with Olabs Wallmount Enclosures.

Easily snap-in design with 2 sizes options and different choices of adapter interfaces.

## KEY FEATURES :

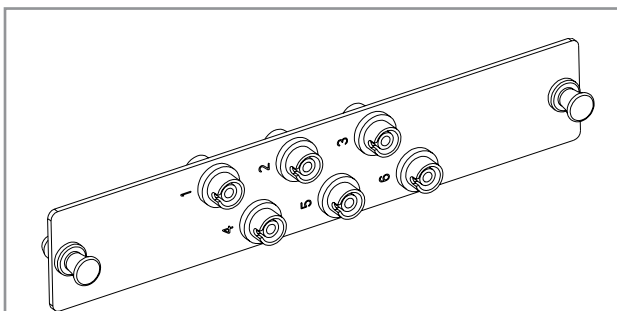
- Easily snap into Olabs wallmount enclosures
- Comprehensive range of adapter types to fit for each installation needs
- Choices of FC, SC, ST or LC with Singlemode or Multimode
- Interchangeable for indoor or outdoor wallmounts enclosures allows easy MACs

## Specifications

<b>Main Material</b>	Aluminum
<b>Dimension</b>	Size C : 28mm x 155mm
<b>Height (H) x Width (W)</b>	Size D : 28mm x 120mm
<b>Snap Distance (mm)</b>	Size C : 145 mm Size D : 108 mm
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS
<b>Preloaded Units</b>	Fiber Optic Adapters Silk-printed Channel Numbering Marks

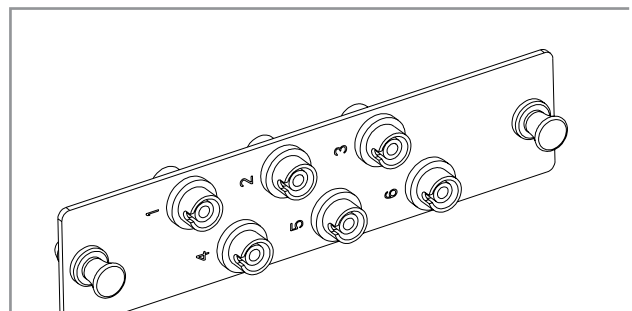
Wallmount Adapter Faceplates are offered in 2 different sizes.

**Size-C Faceplate: 28(H) x 155(W) mm**



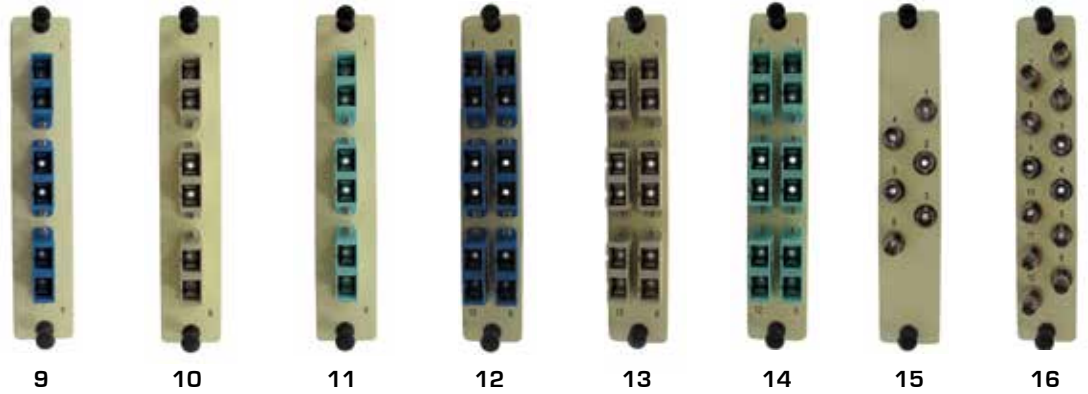
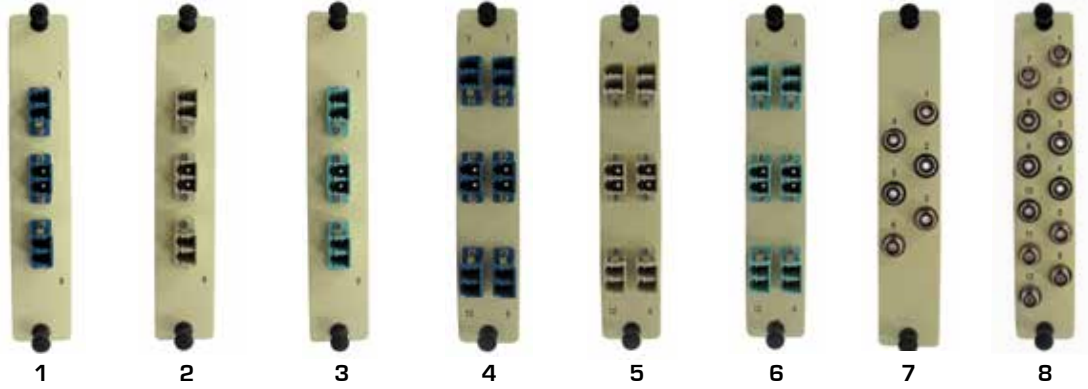
Used to house into  
Size-2 to Size-5 Wallmount

**Size-D Faceplate: 28(H) x 120(W) mm**



Used to house into  
Size-1 Wallmount

# WALLMOUNT ADAPTER FACEPLATES



## LC FACEPLATE

Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-C: 28(H) x 155(H) mm	Size-D: 28(H) x 120(W) mm
1	6	Green	OS1/2 (APC)	N/A	D406G
	6	Blue	OS1/2	N/A	D406B
2	6	Beige	OM1, OM2	N/A	D406R
3	6	Aqua	OM3, OM4	N/A	D406A
4	12	Green	OS1/2 (APC)	C412G	D412G
	12	Blue	OS1/2	C412B	D412B
5	12	Beige	OM1, OM2	C412R	D412R
6	12	Aqua	OM3, OM4	C412A	D412A

# WALLMOUNT ADAPTER FACEPLATES

## FC FACEPLATE

Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-C: 28(H) x 155(H) mm	Size-D: 28(H) x 120(W) mm
7	6	Metallic	Suitable for all modes	N/A	D106N
8	12	Metallic	Suitable for all modes	C112N	N/A

## SC FACEPLATE

Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-C: 28(H) x 155(H) mm	Size-D: 28(H) x 120(W) mm
9	6	Green	OS1/2 (APC)	N/A	D206G
	6	Blue	OS1/2	N/A	D206B
10	6	Beige	OM1, OM2	N/A	D206R
11	6	Aqua	OM3, OM4	N/A	D206A
12	12	Green	OS1/2 (APC)	C212G	D212G
	12	Blue	OS1/2	C212B	D212B
13	12	Beige	OM1, OM2	C212R	D212R
14	12	Aqua	OM3, OM4	C212A	D212A

## ST FACEPLATE

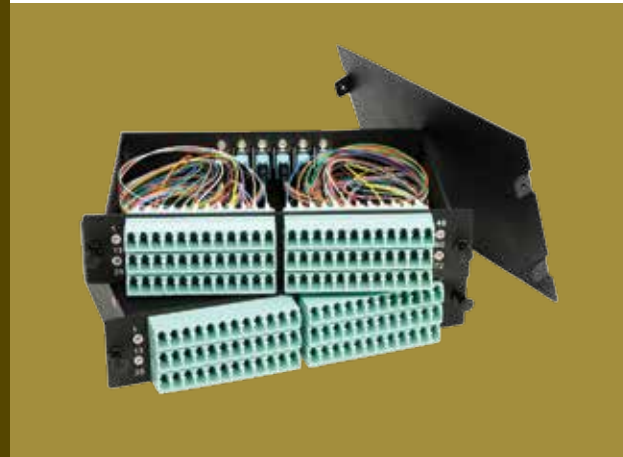
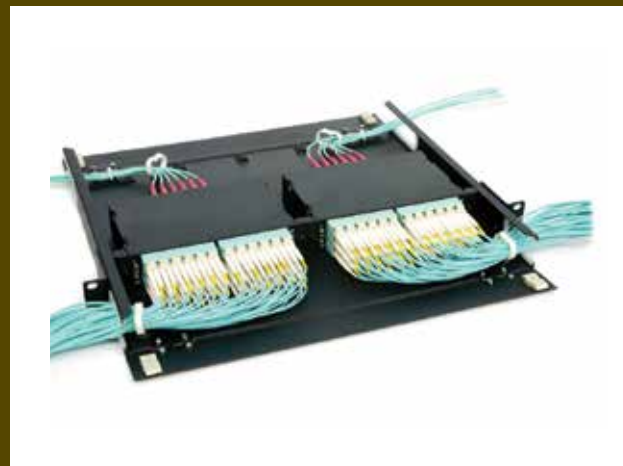
Item Description				Part No. for 2 Sizes	
Item	No. of Fiber Per Faceplate	Adapter Color	Fiber Mode	Size-C: 28(H) x 155(H) mm	Size-D: 28(H) x 120(W) mm
15	6	Metallic	Suitable for all modes	N/A	D306N
16	12	Metallic	Suitable for all modes	C312N	N/A

# HIGH DENSITY FIBER SYSTEM

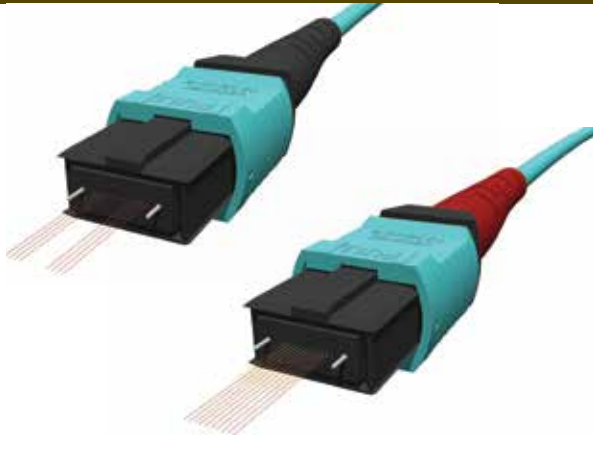
Olabs MAKES the implementation of ultra high density data center architectures possible

Nowadays mission critical data centers are rushing to keep pace with the increased amount of information flooding network space. FiberFlex™ High Density Fiber System is built to support high-density data center applications.

Comprise of high density plug-and-play enclosures, innovatively engineered HD MPO cassette modules, as well as high performance MPO fiber cabling products, our FiberFlex™ High Density Fiber System makes the implementation and management of ultra high density data center architectures possible.



# FiberFlex™



## HIGH DENSITY PLUG-AND-PLAY ENCLOSURES

P.98 | HD Plug-and-Play Enclosures

## HIGH DENSITY MPO CASSETTE MODULES

P.99 | HD MPO Cassette Modules

## MPO ASSEMBLIES

P.101 | MPO Assemblies for 40G/100G

## PATCHCORDS FOR HD APPLICATION

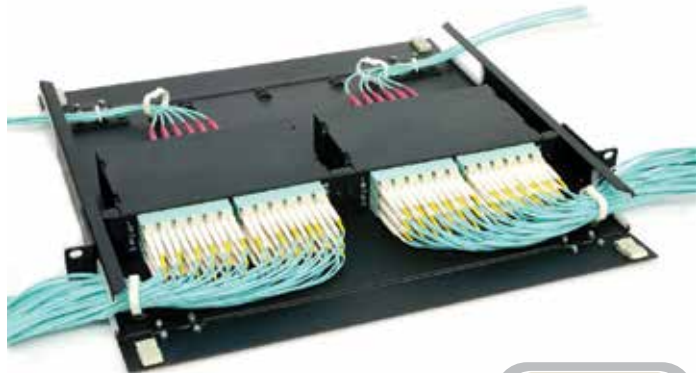
P.102 | HD Series Patchcords



# HD PLUG-AND-PLAY ENCLOSURES

380mm depth rack-mountable HD enclosure uses to house 2pcs of 72-Fiber HD MPO plug-and-play cassette modules (in Page 99).

It supports 144-Fiber per 1U rack space, the solution has a 50% increase in usable density, allowing more rack space in a high density data center application.



## KEY FEATURES :

- Industry-leading density of 144-Fiber per 1U
- Compatible with all 19" EIA standard cabinets and rack system
- Meet IEEE802.3ba
- 12- or 24-Fiber MPO connectors terminated with laser optimized OM3 or OM4 fibers
- Plug-and-play system reduces cost of on-site deployment
- Modular design offers high flexibility and scalability

## Specifications

<b>Main Material</b>	Standard offer : Steel Option of Aluminium on request
<b>Dimension</b>	1U x 435mm x 380mm
<b>Height (U) x Width (W) x Depth (D)</b>	
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA-310, IEEE802.3ba
<b>Optional Preloaded Units</b>	MPO-LC Cassette (Optional) Adjustable Rackmount Ears, 70mm from the front plate (x 2pcs)

Item Description					Part No.	
Rack Unit	Cassette Slot Orientation	Total No. of Cassette Slot Per Enclosure	Accommodate Cassette Size (H x W x D in mm)	Max. Fiber Capacity Per Enclosure	P/N for Enclosure without Cassette	P/N for Enclosure Preloaded with HD MPO-LC Cassette <sup>(1),(2),(3)</sup>
1U	Horizontal	2	Size-C: 40 x 208 x 116	144F	HD1	HD1-02-HMCxxD

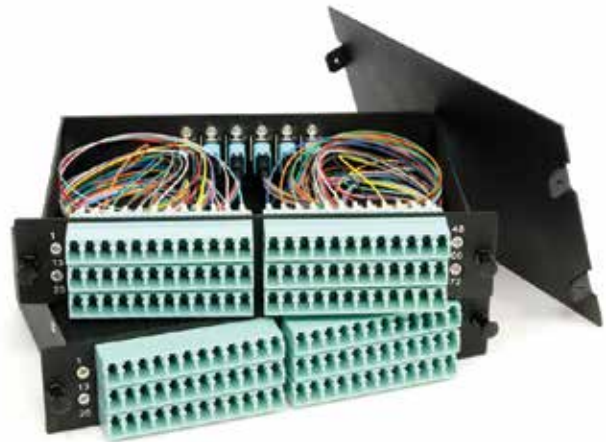
[1] Part Nos. highlighted as HMCxxD refers to the selection of HD MPO-LC cassette, please turn to Page 100 to select Part Nos. for HD MPO-LC cassette  
 [2] When cassettes are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment.  
 [3] When cassettes are to be ordered separately with individual Part Nos. as in Page 100, the cassettes will be packed and shipped separately.

# HD MPO CASSETTE MODULES

High Density snap-in MPO Cassette preloaded with 72-Fiber MPO to LC hydra assemblies.

Use to house into Olabs'plug-and-play high density rackmount enclosure (in Page 98), it supports high density plug-and-play system for improving cable manageability and quick installation.

Options of 6x12F MPO or 3x24F MPO to cater for different cable management needs.



## KEY FEATURES :

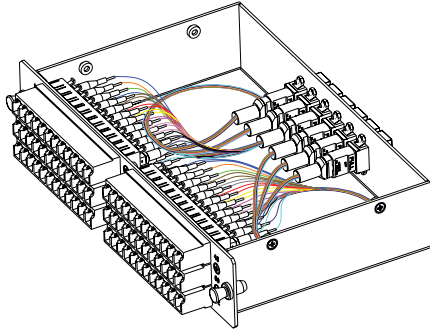
- Integrated with Olabs High Density Plug-and-Play Enclosures
- 72-Fiber per cassette by using 6x12F or 3x24F MPO connector for options
- MPO pinned (Male) with customer specified fiber mode and channel polarity
- User friendly snap-in modular cassette design
- Reduce labour cost by eliminating field terminations
- Pre-installed with factory-terminated MPO to LC hydra assemblies

## Specifications

<b>Main Material</b>	Standard offer : Steel Option for Aluminum upon request
<b>Dimension</b> <b>Height (H) x Width (W) x Depth (D)</b>	40mm x 208mm x 116mm
<b>Available Interface</b>	MPO to LC
<b>Fiber Count per Cassette</b>	72-Fiber per Cassette Options of 6x12F MPO-Male, or 3x24F MPO-Male
<b>Available Fiber Modes</b>	Singlemode [OS 1/2] Multimode [OM1, OM2, OM3, OM4]
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS
<b>Optional Preloaded Units</b>	MPO-Male Hydra Assemblies MPO Adapter (at the rear) LC Adapter (at the front) Channel Label and Data Label (printed on the front and rear)

# HD MPO CASSETTE MODULES

## PRELOADED WITH 6X12F MPO INTERFACE



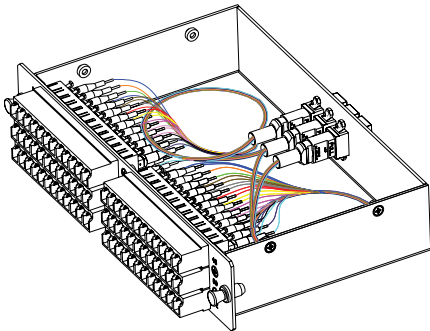
Preloaded: 6pcs of 12-Fiber MPO to LC Hydra Assemblies  
72-Port LC Adapters at the Front  
6pcs of MPO Adapter at the Rear

Item Description			Part No. <sup>(1), (2)</sup>
Fiber Count Per Cassette	Fiber Mode	Color of LC Adapter	
72	OS1/OS2	Blue	HMC4S1D
72	OM1	Beige	HMC4M1D
72	OM2	Beige	HMC4M2D
72	OM3	Aqua	HMC4M3D
72	OM4	Aqua	HMC4M4D

(1) The above Part No. refer to using standard MPO connector, please contact Olabs support team when Low Loss MPO is required

(2) All plug-and-play cassette is pinned (Male), please contact Olabs support team when Non-pinned (Female) cassette is required

## PRELOADED WITH 3X24F MPO INTERFACE



Preloaded: 3pcs of 24-Fiber MPO to LC Hydra Assemblies  
72-Port LC Adapters at the Front  
3pcs of MPO Adapter at the Rear

Item Description			Part No. <sup>(1), (2)</sup>
Fiber Count Per Cassette	Fiber Mode	Color of LC Adapter	
72	OS1/OS2	Blue	HMC5S1D
72	OM1	Beige	HMC5M1D
72	OM2	Beige	HMC5M2D
72	OM3	Aqua	HMC5M3D
72	OM4	Aqua	HMC5M4D

(1) The above Part No. refer to using standard MPO connector, please contact Olabs support team when Low Loss MPO is required

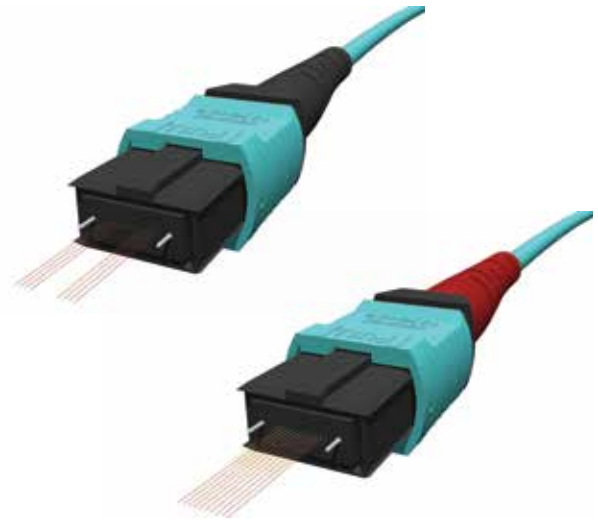
(2) All plug-and-play cassette is pinned (Male), please contact Olabs support team when Non-pinned (Female) cassette is required

# MPO ASSEMBLIES FOR 40G/100G

MPO Assemblies that specially designed for laser optimized 40G/100G structured cabling system that employs parallel optics transmission.

## KEY FEATURES :

- Most cost effective solution for getting 40G/100G transmissions
- Pre-terminated 12- or 24-Fiber MPO assemblies in customized configurations
- Specifically terminated with unique fiber channeling to cater for 40G/100G Ethernet
- High Density solution within tiniest physical space
- To support high bandwidth applications



## Specifications

<b>Unique Fiber Channeling for 40G/100G Ethernet</b>	40G on 12-Fiber MPO connector
	Channel #1 ~ 4 for Tx, 9 ~ 12 for Rx
	Channel #5 ~ 8 unused
	100G on 2pcs of 12-Fiber MPO connector
	Channel #2 ~ 11 for Tx to the first connector
	Channel #2 ~ 11 for Rx to the second connector
	Channel #1 & #12 unused for both connectors
	100G on 24-Fiber MPO connector
	Channel #2 ~ 11 for Rx, 14 ~ 23 for Tx
	Channel #1, 12, 13, 24 unused
<b>Cable Structure</b>	Mini-core Cable
<b>Cable Jacket Colors</b>	Yellow - Singlemode (OS 1/2)
	Orange - Multimode (OM1, OM2)
	Aqua - Multimode (OM3, OM4)
<b>Connector Type Options</b>	Pinned MPO (Male)
	Non-pinned MPO (Female)
<b>Available Fiber Modes</b>	Singlemode (OS 1/2)
	Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Riser (OFNR)
	Low Smoke Zero Halogen (LSZH)
	Plenum (OFNP)

## Optical Performance

Type	Standard MPO		Low Loss MPO	
	Singlemode	Multimode	Singlemode	Multimode
<b>Fiber Mode</b>	@1310nm	850nm	@1310nm	@850nm
<b>Insertion Loss</b>	≤ 0.75dB	≤ 0.6dB	≤ 0.35dB	≤ 0.35dB
	Typical 0.25 dB	Typical 0.25 dB	Typical 0.10 dB	Typical 0.10 dB
<b>Return Loss</b>	≥ 50dB	≥ 20dB	≥ 55dB	≥ 20dB

\* Customized optical performance is available upon request, please contact Olabs team for details.

**!** PLEASE TURN TO PAGE 53 ~ 57 FOR DETAILED SPECIFICATIONS AND PART NO.

# HD SERIES PATCHCORDS

3 patchcord solutions are especially cater for high-density fiber optic patching environments, such as Data Centers deployments.

They are offered with the unique features for allowing optimal space utilization and to increase energy efficiency by improving air flow.

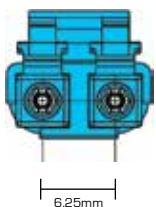
All patchcords are made according to customer specified length and fiber mode with Small Form Factor LC connector interface.

## MINI-LC PATCHCORD



### KEY FEATURES :

- Minimized physical center pitch from 6.25mm to 5.25mm
- Minimized physical footprint without any compromise on performance compare to standard LC patchcords
- Reduced footprint saving space and increase energy efficiency
- Minimizing cable's impact on air flow
- Increase port density by reduced footprint on Duplex LC patch



Standard LC Connector  
Front View



Mini-LC Connector  
Front View

**!** PLEASE TURN TO PAGE 32 FOR DETAILED SPECIFICATIONS AND PART NO.

## LC-UNIBOOT PATCHCORD



### KEY FEATURES :

- LC duplex patchcord with unified connector housing and single boot
- Connector could be mounted closer to the faceplate compare to standard LC
- Use of Round Duplex cable that is compact in size
- Reduced nos. of cables to half for dramatically save spaces

# HD SERIES PATCHCORDS



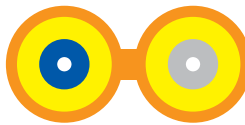
Use of unified connector housing and Round Duplex Cable dramatically save space and reduced numbers of cables required

### LC-Uniboot Patchcords using Round Duplex Cable



Cable size =  $\varnothing$ 3mm  
Space required for installing 2-Fiber channels = 3mm x 1

### Normal LC Patchcords using Duplex Zipcord Cable



Cable size = 3 x 6mm  
Space required for installing 2-Fiber channels = 2 times as of LC-Uniboot

**!** PLEASE TURN TO PAGE 33 FOR DETAILED SPECIFICATIONS AND PART NO.

## LC PATCHCORD WITH MINI 1.2MM CABLE ASSEMBLY



### KEY FEATURES :

- Ultra small 1.2mm jacketed cable assemblies
- Terminated by 1.2mm jacketed cable with Kelvar for promising pulling strength
- Save more than 60% of space than using common 2.0mm cable patchcords
- Uncompromising pulling force in comparison with 2.0mm cable patchcords



Common LC Assembly

1.2mm Mini-LC Assembly

Ultra small 1.2mm jacketed cable to save more than 60% of space with uncompromising pulling force

**!** PLEASE TURN TO PAGE 34 FOR DETAILED SPECIFICATIONS AND PART NO.



# RACKS AND CABLE MANAGEMENT

---

Olabs reliable rack and cable management system **CREATES** a new level of stability to the network infrastructure





Our cabinet and rack system is designed by combining the principles of simplicity and concepts of flexibility and scalability, yet providing a versatile and effective solution to protect the critical components of your IT environment. It supports applications ranging from computer rooms, telecom rooms, cross connect cabling, to enterprise data centers, offering the most reliable solution for management of cables and housing of networking equipment.

Complementary with cabinet and rack system, we offer comprehensive rack accessories, cable routing systems and cable management items to provide a complete and value-added cable management solutions to enhance your installation efficiency.

## CABINET & RACK SYSTEM

P.108	Cabinets
P.112	Open Racks
P.114	Wallmount Cabinets

## CABINET & RACK ACCESSORIES

P.116	Power Distribution Units
P.118	KVM Switches
P.120	Sliding Shelves

## CABLE MANAGEMENT SYSTEM

P.121	Fiber Raceways
P.124	Vertical Cable Managers
P.125	Horizontal Cable Managers
P.126	Fiber Outlets

# CABINET & RACK SYSTEM

## Provide Secure Housing to Fit Every Network Environments

Our cabinet and rack system is offered with extensive range of items include floor-standing cabinets, open racks and wallmount cabinets to fit for every network environments and different installation needs.

Constructed of sturdy steel and powder coating finishing, our solutions provide secure housing to protect your critical IT components and effective cable management.

They are offered with different tiers of loading capacity, combining various options of height, width and depth for optimizing the flexibility of space utilization.



RACKS AND CABLE MANAGEMENT

CABINET & RACK SYSTEM

Type	Standard Model Cabinet (Page 109)	Heavy Duty Cabinet (Page 110)	Server Cabinet (Page 111)
Available Rack Unit	37U 42U 45U	37U 42U 45U	37U 42U 45U
Available Width (mm)	600 800	600 800	800
Available Depths (mm)	600 800 1000 1200	600 800 1000 1200	800 1000 1200
Max. Loading Capacity (Kgs)	750	1200	1600
Packing	Options of Flat-Pack or Fully Built Unit	Options of Flat-Pack or Fully Built Unit	Fully Built Before Delivery
Vertical Cable Management on Both Sides	✓ <small>(only for the models with 800mm width)</small>	✓ <small>(only for the models with 800mm width)</small>	✓
Optional Horizontal Cable Management	✓	✓	✓
Optional Fixed/Sliding Shelf	✓	✓	✓
Optional Top Mount Fans Kit	✓	✓	✓

# CABINET & RACK SYSTEM



Open Rack  
(Page 112)

Wallmount Cabinet -  
Standard  
(Page 115)

Wallmount Cabinet -  
Heavy Duty  
(Page 115)

37U	9U	9U
42U	12U	12U
45U	21U	21U
	27U	27U
540	600	600
380	600	600
600	60	90
Fully Built Before Delivery	Fully Built Before Delivery	Fully Built Before Delivery
Optional	—	—
✓	—	—
—	✓	✓
—	✓	✓

# CABINETS

Olabs' floor-standing cabinets are compatible with 19" EIA standard rack enclosure and rackmount equipment.

Available for 37U, 42U and 45U with various size options.

Convenient removable perforated front and rear doors reaches 45% overall ventilation rate for optimizing air flow.

Made of sturdy steel with black powder coating, supplied in flat-pack or fully assembled unit according to different needs.

## KEY FEATURES :

- Support 19" EIA standard rack enclosures
- Quick release clip-lock side panels allow easy access to inside parts
- Lockable perforated front and rear door with swing handle lock for optimizing the best air flow
- Ruggedized framework with superior loading and durability
- Vertical mounting rails with numbered RU marks
- Made of sturdy steel with black powder coating



## Specifications

<b>Main Material</b>	Steel
<b>Compliance</b>	RoHS, GR-63-CORE, Zone-4 Test (NEBS requirement)
<b>Doors Ventilation</b>	Reaches 5315cm <sup>2</sup> (824 in <sup>2</sup> )
<b>Front Door</b>	Perforated Door with 3-point Key Lock
<b>Rear Door</b>	Perforated Door with 3-point Key Lock
<b>Side Panel</b>	Solid Side Panel (with detachable quick release clip-lock )
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Other Accessories</b>	Mounting Rails with Numbered RU Marks Fixed Shelves (2pcs) Castor & Leveling Feet (4pcs) Earthing Kit (1set) M6 Cage Nuts, Cup Washers & Fixings (x 50pcs)



Heavy duty castors for easy move and change



Perforated doors enhance ventilation



3-point key lock for easy access

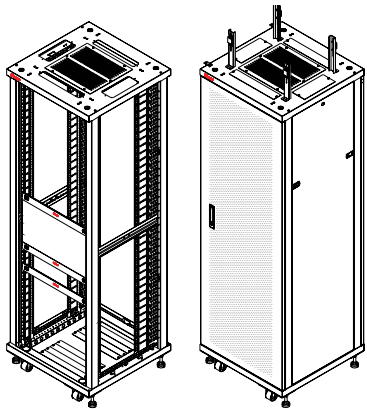
# CABINETS

### STANDARD MODEL SERIES

Standard Model Series offer wide range of combinations in cabinet sizes which designed to accommodate a loading of up to 750Kgs.

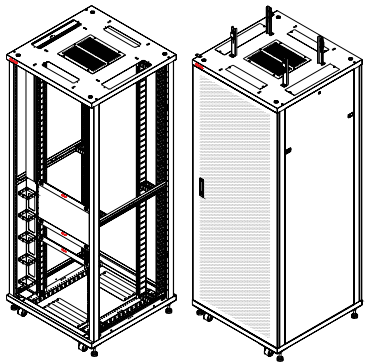
Suitable for most of the working areas in data center and enterprise networks, the cabinet is ideal for the installation of patch panel and AV equipment.

600mm Width Option			Part No. for 3 Height Options		
Width (mm)	Depths (mm)	Loading Capacity (Kgs)	37U Overall Height 1861mm	42U Overall Height: 2083mm	45U Overall Height: 2216mm
600	600	750	CST37U1F	CST42U1F	CST45U1F
600	800	750	CST37U2F	CST42U2F	CST45U2F
600	1000	750	CST37U3F	CST42U3F	CST45U3F
600	1200	750	CST37U4F	CST42U4F	CST45U4F



\* All Cabinets are supplied in flat pack structure, please contact our sales team for fully built option.

800mm Width Option			Part No. for 3 Height Options		
Width (mm)	Depths (mm)	Loading Capacity (Kgs)	37U Overall Height 1861mm	42U Overall Height: 2083mm	45U Overall Height: 2216mm
800	800	750	CST37U5F	CST42U5F	CST45U5F
800	1000	750	CST37U6F	CST42U6F	CST45U6F
800	1200	750	CST37U7F	CST42U7F	CST45U7F



\* All Cabinets are supplied in flat pack structure, please contact our sales team for fully built option.

\* 2pcs of vertical cable management rails will be provided.



Convenient removable front and rear door



Quick release clip-lock side panels



Optional top fans kit cater for non-vented sites

# CABINETS

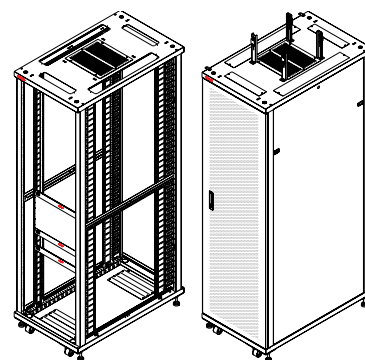
## HEAVY DUTY SERIES

Heavy Duty Series provide the same set of design features as standard model with added loading capacity to accommodate up to 1200Kgs.

It is ideal for housing network storage and telecom equipment in data centers, server rooms and network closets.

### 600mm Width Option

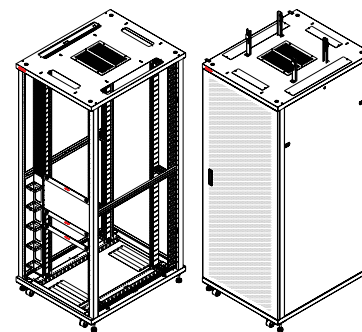
Item Description			Part No. for 3 Height Options		
Width (mm)	Depths (mm)	Loading Capacity (Kgs)	37U Overall Height 1861mm	42U Overall Height: 2083mm	45U Overall Height: 2216mm
600	800	1200	CHD37U2F	CHD42U2F	CHD45U2F
600	1000	1200	CHD37U3F	CHD42U3F	CHD45U3F
600	1200	1200	CHD37U4F	CHD42U4F	CHD45U4F



\* All the Cabinet are supplied in flat pack structure, please contact our sales team for fully built option.

### 800mm Width Option

Item Description			Part No. for 3 Height Options		
Width (mm)	Depths (mm)	Loading Capacity (Kgs)	37U Overall Height 1861mm	42U Overall Height: 2083mm	45U Overall Height: 2216mm
800	800	1200	CHD37U5F	CHD42U5F	CHD45U5F
800	1000	1200	CHD37U6F	CHD42U6F	CHD45U6F
800	1200	1200	CHD37U7F	CHD42U7F	CHD45U7F



\* All the Cabinet are supplied in flat pack structure, please contact our sales team for fully built option.  
 \* 2pcs of vertical cable management rails will be provided.

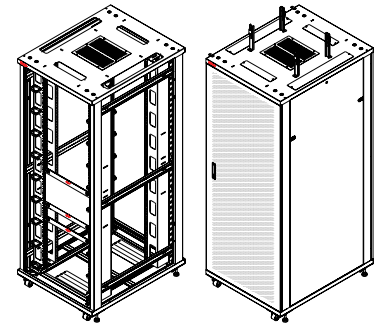
# CABINETS

## SERVER CABINET SERIES

Designed to provide functionality, physical support and utmost protection for high density server and equipment installations, this series of server cabinets provides the best in class loading capacity of up to 1600Kgs, the extra loading capacity allows for high density equipment installations.

It is an ideal option for high density data centers and suitable for wide range of applications include equipment rooms and telecommunication rooms.

800mm Width Option			Part No. for 3 Height Options		
Width (mm)	Depths (mm)	Loading Capacity (Kgs)	37U Overall Height: 1861mm	42U Overall Height: 2083mm	45U Overall Height: 2216mm
800	800	1600	CEC37U5B	CEC42U5B	CEC45U5B
800	1000	1600	CEC37U6B	CEC42U6B	CEC45U6B
800	1200	1600	CEC37U7B	CEC42U7B	CEC45U7B



\* All the Cabinet are fully built before delivery.  
 \* 2pcs of vertical cable management rails will be provided.

## Modular Accessories and Partial Customization

Beyond standard offering, Olabs provides partial customization on our cabinet products enabling you to customize your solution to meet any requirements.

Flexible customizations such as glass door, double open door or intelligent door lock can be supplied to best fit your on-site operation needs, please contact our sales team for details.

Other optional accessories are also available to offer extra flexibility. All accessories are designed and provided with the concept of simplicity yet providing the best functionality in modular structure.

### LIST OF ACCESSORIES

- Top mount fans kit
- Brush strip
- Extra 19" Fixed Shelves
- 19"1U or 2U blind plate
- Baying kit
- Power Distribution Unit (refer to Page 116 for details)
- Horizontal Cable Manager (refer to Page 125 for details)
- 19" Sliding Shelves (refer to Page 120 for details)
- KVM Switch (refer to Page 118 for details)



# OPEN RACKS

Olabs standard 19" EIA Two-Post Open Rack offers flexible choices of 37U, 42U and 45U with optional built-in vertical cable management rails on both sides, suitable for any 19" rack-mountable equipment or patch panels for easy access to cables.

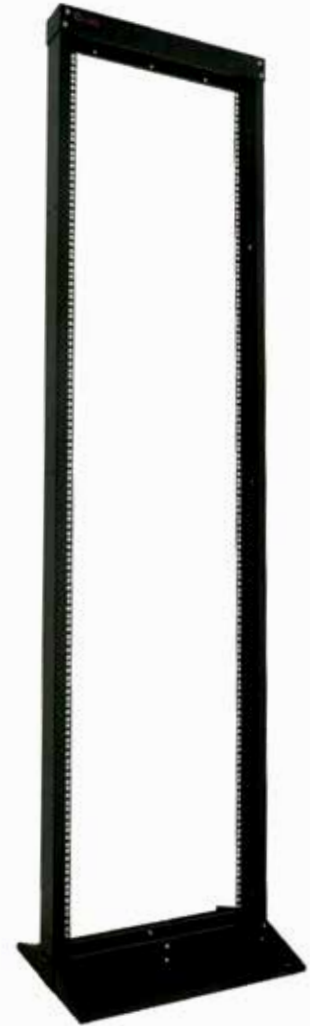
All open racks are made of steel with sturdy structure and are supplied in fully assembled units.

## KEY FEATURES :

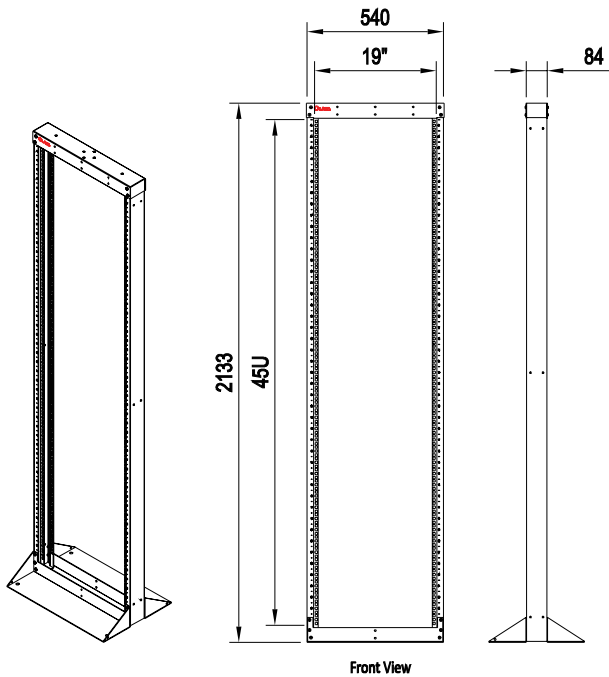
- Optional built-in vertical cable management rails on both sides
- Space saving footprint with size of 380mm (Depth) x 540mm (Width)
- Extendable built-in vertical cable management rails designed to maximize support of high density patching
- Numbered RU positions for ease of installation
- Ruggedized framework with superior loading and durability

## Specifications

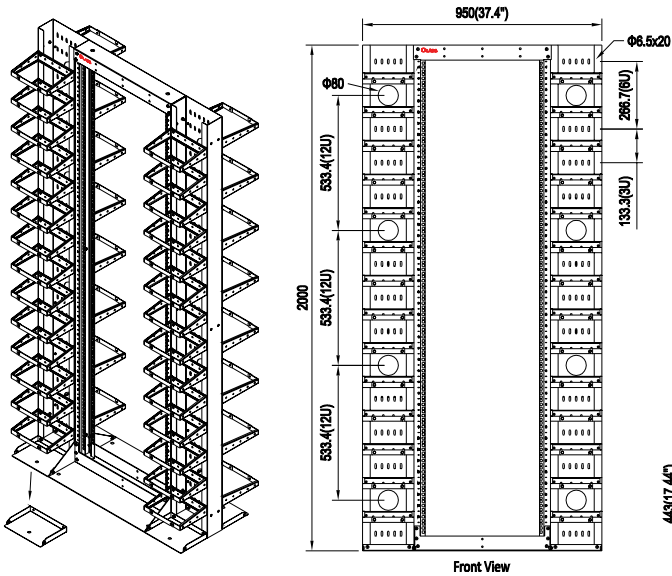
<b>Main Material</b>	Steel
<b>Base Dimension (W x D) mm</b>	540 x 380 (base to base)
<b>Loading Capacity</b>	600Kgs
<b>Net Weight</b>	18.1Kgs (37U) 19.3Kgs (42U) 19.9Kgs (45U)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Compliance</b>	RoHS, EIA
<b>Optional Accessories</b> (To be ordered seperately)	Vertical Cable Manager Horizontal Cable Manager



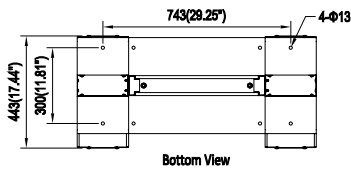
# OPEN RACKS



Item Description	Overall Height (mm)	Part No.
Standard 2-Post Open Rack , 37U	1778	ORN37U8B
Standard 2-Post Open Rack , 42U	2000	ORN42U8B
Standard 2-Post Open Rack , 45U	2133	ORN45U8B



Item Description	Overall Height (mm)	Part No.
2-Post Open Rack , 37U, with Vertical Cable Managers	1778	ORV37U8B
2-Post Open Rack , 42U, with Vertical Cable Managers	2000	ORV42U8B
2-Post Open Rack , 45U, with Vertical Cable Managers	2133	ORV45U8B



# WALLMOUNT CABINETS

Olabs Wallmount Cabinet series offers 9U, 12U, 21U and 27U with choices of Heavy Duty and Standard Model to accommodate different installation needs.

They are constructed of rugged steel frame with IP20 rating, suitable for housing any 19" EIA standard rackmountable equipment or patch panels within the corridor or closet areas.

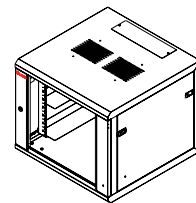
All wallmount cabinets are supplied in fully assembled unit, with pre-bundled accessories include earthing kit, top plates, mounting rails and nuts sets.

## KEY FEATURES :

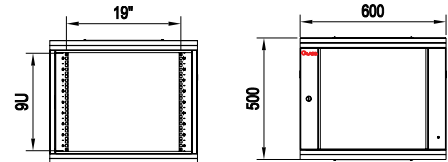
- Multiple cable entrances from top or bottom allowing flexible cable routing
- Transparent door opens 180°
- Lockable door design to restrict unauthorized access with added security
- EIA compliant mounting rail with numbered RU
- Optional top mount fans kit (with 2-slot)
- Quick release clip-lock side panels allow easy access to equipment and patch units

## Specifications

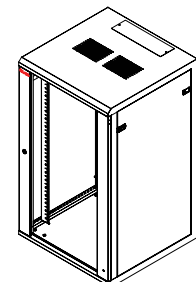
<b>Main Material</b>	Steel
<b>Operation Temperature</b>	- 40°C to + 60°C
<b>Ingress Protection Level</b>	IP20
<b>Compliance</b>	RoHS, IEC, EIA
<b>Front Door</b>	Transparent Glass Door with Key Lock
<b>Slide Panel</b>	Solid Side Panel (Detachable)
<b>Color &amp; Coating</b>	Black Powder Coating
<b>Accessories included</b>	Earthing Kit (1 pc) Top Plate (2pcs) Mounting Rail with Numbered RU (2pcs) Nuts, Cup Washers & Fixings (20 sets)
<b>Optional Accessories</b> (To be ordered seperately)	Top mount fan kit (Max. 2 pcs for each wallmount cabinet)



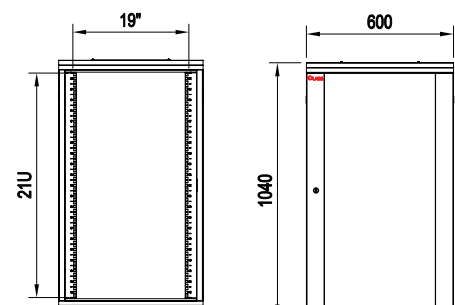
9U WALLMOUNT CABINET



Front View without Door Front View with Door



21U WALLMOUNT CABINET



Front View with Door Front View without Door

# WALLMOUNT CABINETS

## STANDARD MODEL SERIES

Standard Model Series with loading up to 60Kgs.

Item Description						Part No.
Rack Unit	Overall Height (mm)	Width (mm)	Depth (mm)	Loading Capacity (Kgs)	Net Weight (Kgs)	
9U	500	600	600	60	19.5	WST09U1B
12U	640	600	600	60	23.5	WST12U1B
21U	1040	600	600	60	31.5	WST21U1B
27U	1307	600	600	60	36.5	WST27U1B

- \* Free standing installation is suggested to be applied for 9U and 12U cabinet.
- \*\* A Floor standing support is suggested to be provided for installing 21U and 27U cabinet.
- \*\*\* All the Cabinet are fully built before delivery.

## HEAVY DUTY SERIES

Heavy Duty Series carries ruggedized frame work structure with loading up to 90Kgs.

Item Description						Part No.
Rack Unit	Overall Height (mm)	Width (mm)	Depth (mm)	Loading Capacity (Kgs)	Net Weight (Kgs)	
9U	500	600	600	90	25.2	WHD09U1B
12U	640	600	600	90	28.6	WHD12U1B
21U	1040	600	600	90	39.9	WHD21U1B
27U	1307	600	600	90	46.4	WHD27U1B

- \* Free standing installation is suggested to be applied for 9U and 12U cabinet.
- \*\* A Floor standing support is suggested to be provided for installing 21U and 27U cabinet.
- \*\*\* All the Cabinet are fully built before delivery.

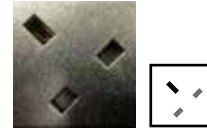
# POWER DISTRIBUTION UNITS

Olabs standard PDU is offered in UK style (BS1363) sockets in 45-degree or 135-degree, and selectable input plugs with choices of IEC60309 style, IEC60320 style or UK BS1363 style.

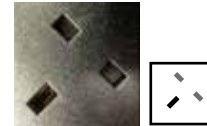
Options of vertical and horizontal PDU with 6-, 8-, 10- or 12-way sockets to support different needs.



## OUTLET SOCKET STYLE



45° UK socket



135° UK socket

## INPUT PLUG STYLE



IEC320 (C14 10A)



IEC60309 (16A 2P+E)



BS1363 UK Style (13A)

## KEY FEATURES :

- Offered in BS1363 UK style outlet socket, other specified socket style available for call-out
- Selectable input plug and voltage with choices of IEC60309, IEC60320 or UK BS1363
- Options of vertical and horizontal PDU with 6-, 8-, 10- or 12-way sockets
- BS1363 outlet socket with 45-degree and 135-degree as option
- Suitable for use in standard server racks, wallmount racks, LAN racks in any IT environments
- Left end single input and inverse installation

## Specifications

### 1. Input Characteristics

Plug Style	IEC60309 (2P+E)	BS1363 UK-style	IEC60320 (C14)
Rated Input Voltage	250VAC 50/60Hz	250VAC 50/60Hz	250VAC 50/60Hz
Max Input Current	16A	13A	10A
Cable Specification	3 x 2.5mm <sup>2</sup> x 3M	3 x 2.5mm <sup>2</sup> x 3M	3 x 1.5mm <sup>2</sup> x 3M

### 2. Product Characteristics

Outlet Quantity	6-Way	8-Way	10-Way	12-Way
Mounting Distance (mm)	465	550	670	790
Mounting Method	Horizontal (Or Vertical)	Vertical	Vertical	Vertical
Dimension LxWxH (mm)	483 x 44.4 x 62	578 x 44.4 x 62	698 x 44.4 x 62	818 x 44.4 x 62
Shell Color	Black	Black	Black	Black

## POWER DISTRIBUTION UNITS

## 6-Way Options - 483mm(L) x 44.4mm(W) x 62mm(H), Horizontal

Item Description						Part No.
Socket Qty	Socket Style (Output)	Plug Type (Input)	Rating Current	Power Cable Specification	Cable Length	
6	BS1363, UK (45-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	H06AB03
6	BS1363, UK (45-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	H06AA03
6	BS1363, UK (45-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	H06AC03
6	BS1363, UK (135-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	H06CB03
6	BS1363, UK (135-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	H06CA03
6	BS1363, UK (135-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	H06CC03

## 8-Way Options - 578mm(L) x 44.4mm(W) x 62mm(H), Vertical

Item Description						Part No.
Socket Qty	Socket Style (Output)	Plug Type (Input)	Rating Current	Power Cable Specification	Cable Length	
8	BS1363, UK (45-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	V08AB03
8	BS1363, UK (45-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	V08AA03
8	BS1363, UK (45-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	V08AC03
8	BS1363, UK (135-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	V08CB03
8	BS1363, UK (135-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	V08CA03
8	BS1363, UK (135-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	V08CC03

## 10-Way Options - 698mm(L) x 44.4mm(W) x 62mm(H), Vertical

Item Description						Part No.
Socket Qty	Socket Style (Output)	Plug Type (Input)	Rating Current	Power Cable Specification	Cable Length	
10	BS1363, UK (45-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	V10AB03
10	BS1363, UK (45-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	V10AA03
10	BS1363, UK (45-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	V10AC03
10	BS1363, UK (135-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	V10CB03
10	BS1363, UK (135-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	V10CA03
10	BS1363, UK (135-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	V10CC03

## 12-Way Options - 818mm(L) x 44.4mm(W) x 62mm(H), Vertical

Item Description						Part No.
Socket Qty	Socket Style (Output)	Plug Type (Input)	Rating Current	Power Cable Specification	Cable Length	
12	BS1363, UK (45-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	V12AB03
12	BS1363, UK (45-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	V12AA03
12	BS1363, UK (45-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	V12AC03
12	BS1363, UK (135-degree)	IEC60309 (2P+E)	16Amp	3 x 2.5mm <sup>2</sup>	3M	V12CB03
12	BS1363, UK (135-degree)	BS1363 UK-style	13Amp	3 x 2.5mm <sup>2</sup>	3M	V12CA03
12	BS1363, UK (135-degree)	IEC60320 (C14)	10Amp	3 x 1.5mm <sup>2</sup>	3M	V12CC03

# KVM SWITCHES

Olabs All-in-One LCD KVM Drawer unit is the device that can control up to 8/16 PCs with PS/2 or USB keyboard and mouse connections.

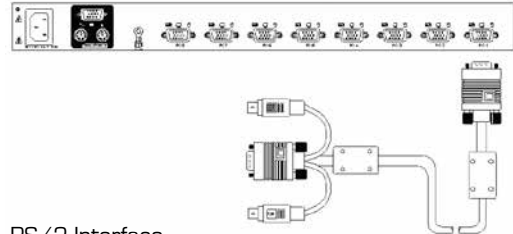
It is expandable by connecting up to 8 switches together to access 128 PCs with standard VGA, DVI and HDMI video interface.

This KVM Switch meets VESA standard and also supports PS/2 or USB keyboard and mouse connections.

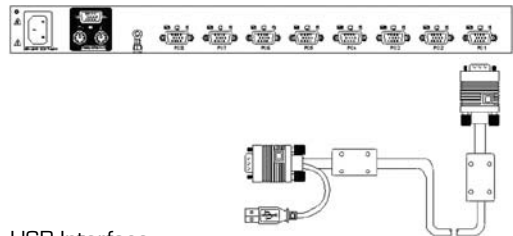
Optional IP box available for IP system.



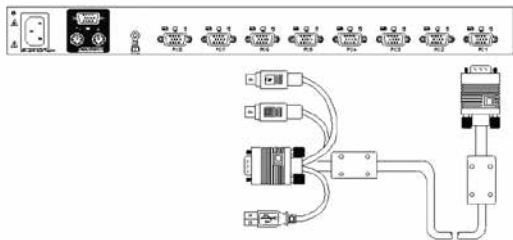
## INTERFACE ILLUSTRATION



PS/2 Interface



USB Interface



PS/2 & USB Interface

## KEY FEATURES :

- Connect 16 computers through one set of peripherals
- Available in 1U with 17" LCD display
- Suitable for 19" EIA cabinets, uses only 1U of rack mount space
- User friendly with no software installation is required
- 3 easy switching functions between computers with buttons, hotkeys or onscreen display smart on/off function
- Auto-scan function mode with 5-99 seconds interval for flexible PC monitoring
- Password protected access and up to 8 user profiles with search function for ports
- LED lights to indicate power status of computer connections
- Supports multiple hardware platform: PC, IBM, HP, DELL, SUN... etc.
- Built-in daisy-chain port for cascading with KVM Switch and supporting up to 8 units



# KVM SWITCHES

## Specifications - KVM Switch

<b>Dimensions (mm)</b>	602.5 x 448 x 42.5
<b>Rack Mounting Depth Range (mm)</b>	600 to 850
<b>Number of PC Connection Ports</b>	8
<b>Operating Systems</b>	Support Microsoft Windows, MAC, SUN Solaris, UNIX, LINUX, NETWARE
<b>LCD Type &amp; Display Size</b>	17" TFT LCD Monitor
<b>Contrast Ratio</b>	500:1 (Typ)
<b>Viewing Angle</b>	140° (H) × 120°(V)
<b>Resolution</b>	1280*1024 (@60Hz)
<b>Pixel Pitch (mm)</b>	0.264 (H) x 0.264 (W)
<b>Brightness</b>	300 cd/m <sup>2</sup> (Typ)
<b>LCD MTBF</b>	> 50,000 hours
<b>Support Video Input</b>	VGA / SVGA / XGA / WXGA
<b>VGA Bandwidth</b>	200MHz
<b>Keyboard Mouse</b>	99 Keys Ultra Thin Keyboard with Touchpad
<b>Power Management</b>	DDC, DDC2, DDC2B, VESA
<b>Power Source Input</b>	Auto-sensing: 90V to 264VAC/12VDC 48W; Direct: -36 to -75VDC/12VDC 48W
<b>Operating Temperature</b>	0 to + 50°C
<b>Storage Temperature</b>	- 20°C to + 60°C
<b>Humidity</b>	0 to 80%, Non-Condensing
<b>Net Weight</b>	15Kgs
<b>Accessories</b>	2m Power Cord, 1.8m VGA Cord

## Specifications - IP Box

<b>Dimensions (mm)</b>	103 x 87 x 28.5
<b>Video Resolution</b>	Up to 2048 x 1536 @60Hz (Local Console) Up to 1600 x 1200 @60Hz (Remote Console)
<b>Physical Connections (Server Side)</b>	3-in-1 Integrated Cable and K/V/M Connectors x 1 USB 2.0 Mini Receptacle x 1 RJ-45 Serial Port x 1
<b>Physical Connections (Local Console Side)</b>	3-in-1 VGA Connector x 1 USB Type-A Connectors x 2
<b>Physical Connections (Remote Console Side)</b>	Standard RJ-45 Connectors (LAN ports) x 2
<b>Protocols</b>	TCP, IP, ARP, ICMP, HTTP/HTTPS, SSL, Telnet, DHCP, PPP, SMTP, NTP, DDNS
<b>Operating Temperature</b>	0 to + 50°C
<b>Power Supply</b>	12VDC, 1A
<b>Net Weight</b>	1000g



Optional IP Box

Item Description	Part No.
KVM Switch with Standard PS/2 Interface	CAKVMPS2
KVM Switch with Standard USB Interface	CAKVMUSB
KVM Switch with Standard PS/2 & USB Interface	CAKVM MIX
IP Box	CAKVMIPB

# SLIDING SHELVES

Designed to support equipment such as computers, monitors, small power appliances that are not having any mounting brackets.

This 1U Rackmount Sliding Shelf is suitable for use with any cabinets with standard EIA 19" mounting posts, offered in 3 depth options with static loading up to 16Kgs.



## KEY FEATURES :

- Suitable for all standard cabinets with EIA 19" mounting posts
- Available in 3 depths: 415mm, 495mm and 700mm
- 4 post mounts to both front and rear panel rails
- Made with high quality steel, black powder coating
- Vented design for better air flow
- Slides out for easy access
- Auto-lock function when fully extended

## Specifications

Types	Type 1 415mm Width	Type 2 495mm Width	Type 3 700mm Width
<b>Main Material</b>	Steel	Steel	Steel
<b>Dimensions ( W x D x H) mm</b>	482 x 415 x 44	482 x 495 x 44	482 x 700 x 44
<b>Maximum Adjustable Length (mm)</b>	375	485	955
<b>Weight (Kgs)</b>	4.6	5.4	7.5
<b>Maximum Loading Capacity (Kgs)</b>	16 (For all types)	16 (For all types)	16 (For all types)
<b>Suitable Cabinet Depth (mm)</b>	600 or 800	800 or 1000	1200
<b>Color &amp; Coating</b>	Black Powder Coating	Black Powder Coating	Black powder coating
<b>Compliance</b>	RoHS	RoHS	RoHS

Item Description	Part No.
19" Mounting Sliding Shelf, 415mm, 16Kgs Loading	CAMSX19415
19" Mounting Sliding Shelf, 495mm, 16Kgs Loading	CAMSX19495
19" Mounting Sliding Shelf, 700mm, 16Kgs Loading	CAMSX19700

# FIBER RACEWAYS



Fiber Raceway System offers in 120/240-Series which composed of various support structures and fittings.

Different shapes and drop-off options, our cable routing system provides you with extreme flexibility on future expansion, allowing you to add parts or change and relocate to other areas when required.

## KEY FEATURES :

- For routing and protecting fiber optic cables
- Various sizes to accommodate your needs
- Fire-retardant materials
- Available in standard yellow and orange colors
- 40mm bending radius for great fiber protection
- Safe and easy access to fiber
- Snap-on joints for connecting components
- Compatible with other fiber raceway systems

### Specifications

<b>Operating Temperature</b>	- 25°C to + 55°C
<b>Relative Humidity</b>	< 85% (+ 40°C)
<b>Atmospheric Pressure</b>	70kPa to 106kPa
<b>Fire Retardant</b>	Complies to GB/T2048
<b>Color</b>	Options of Yellow and Orange

### Width for Cable Routing

120 - Series	160mm
240 - Series	280mm

# FIBER RACEWAYS

## BASIC STRUCTURAL COMPONENT



Item Description		Part No. <sup>(1), (2)</sup>	
Name of the Component	Cover	240 Series	120 Series
<b>1</b> Straight Raceway (2 meters)	Yes	FR-01-240-Y	FR-13-120-Y
<b>2</b> 45° Vertical Outside (Down) Elbow	Yes	FR-02-240-Y	FR-14-120-Y
<b>3</b> 45° Vertical Inside (Up) Elbow	Yes	FR-03-240-Y	FR-15-120-Y
<b>4</b> 45° Horizontal Elbow	Yes	FR-04-240-Y	FR-16-120-Y
<b>5</b> Horizontal T	Yes	FR-05-240-Y	FR-17-120-Y
<b>6</b> Horizontal Cross	Yes	FR-06-240-Y	FR-19-120-Y
<b>7</b> Joint	No	FR-07-240-Y	FR-20-120-Y
<b>8</b> End Cap	No	FR-08-240-Y	FR-22-120-Y
<b>9</b> Vertical T (for 120 Series only)	Channel Cover	N/A	FR-18-120-Y
<b>10</b> Trumpet (for 120 Series only)	No	N/A	FR-21-120-Y
<b>11</b> Support 230 (for 120 Series only)	No	N/A	FR-23-120-N
<b>12</b> Support 300 (for 240 Series only)	No	FR-09-240-N	N/A

(1) About Cover : All the above items with available cover should be order separately.  
Please change the Part No. initial "FR" to "FRC" for ordering cover of that particular item.  
(2) Color : Part Number ends with "Y"= Yellow, "O"= Orange, "N"= Not Applicable

## CONVERSION COMPONENT (From 240 Series to 120 Series)



Item Description		Part No. <sup>(1), (2)</sup>
Name of the Component	Cover	
<b>1</b> 240 to 120 Vertical T	Channel Cover	FR-10-240-Y
<b>2</b> 240 to 120 Horizontal T	Yes	FR-11-240-Y
<b>3</b> 240 to 120 Converter	Yes	FR-12-240-Y

(1) About Cover : All the above items with available cover should be order separately.  
Please change the Part No. initial "FR" to "FRC" for ordering cover of that particular item.  
(2) Color : Part Number ends with "Y"= Yellow, "O"= Orange, "N"= Not Applicable

# FIBER RACEWAYS

## COMMON PART, NUTS AND ACCESSORIES



Item Description		Part No. <sup>(1),(2)</sup>
Name of the Component	Cover	
<b>1</b>	Movable outlet	FR-28-000-Y
<b>2</b>	Tube	FR-29-000-Y
<b>3</b>	Large Movable Outlet	FR-30-000-Y
<b>4</b>	Hanging Supporter	FR-31-000-N
<b>5</b>	C-fastener	FR-32-000-N
<b>6</b>	L-fastener	FR-33-000-N
<b>7</b>	Large Shallow U-fastener	FR-43-000-N
<b>8</b>	Shallow U-fastener	FR-35-000-N
<b>9</b>	T Screw (M6 * 35)	FR-36-000-N
<b>10</b>	Special Nut (M6)	FR-37-000-Y
<b>11</b>	Lock Screw (M6 * 30)	FR-39-000-Y
<b>12</b>	240 Multifunction T	Cover of 240 Tee FR-43-000-Y
<b>13</b>	120 Multifunction T	Cover of 120 Tee FR-44-000-Y
<b>14</b>	Multifunction T Holder	No FR-45-000-Y
<b>15</b>	M6 Screw Nut	No FR-46-000-N
<b>16</b>	M3 Screw	No FR-47-000-N
<b>17</b>	Square Screw Nut	No FR-48-000-N

[1] About Cover : All the above items with available cover should be order separately.  
Please change the Part No. initial "FR" to "FRC" for ordering cover of that particular item.  
[2] Color : Part Number ends with "Y"= Yellow, "O"= Orange, "N"= Not Applicable

# VERTICAL CABLE MANAGERS

Olabs Vertical Cable Manager provides a solution for organizing cable on any Standard 19" EIA two-post open rack system.

Our vertical cable manager can help installers to establish vertical and front-to-rear cable pathways for a single rack or between two bayed racks in the most convenient way.

## KEY FEATURES :

- Curved cable management design to support bend protection
- Ideal for organizing in-rack cables while maintaining plenty of air flow
- Protecting cables from hidden crushes, kinks and snags
- Specially designed footstand for auxiliary support
- EIA compliant with black powder coating

## Specifications

<b>Main Material</b>	Steel	Steel	Steel
<b>Available Rack Unit</b>	37U	42U	45U
<b>Dimensions (H) x (W) x (D) mm</b>	1778 x 203 x 439	2000 x 203 x 439	2133 x 203 x 439
<b>Weight (Kgs)</b>	17.1	19.3	20.8
<b>Cable Capacity</b>	Cat 6, 5E (250) : 650 (Front) / 850 (Rear) Cat 6A (8.0mm) : 400 (Front) / 550 (Rear) 3.0mm Fiber Cable : 3000 (Front) / 3800 (Rear) 9.0mm Fiber Cable : 330 (Front) / 420 (Rear) 11.2mm Fiber Cable : 192 (Front) / 256 (Rear) 13.5mm Fiber Cable : 140 (Front) / 196 (Rear) 17.5mm Fiber Cable : 80 (Front) / 100 (Rear)		
<b>Optional Accessories (Not included in the standard offering)</b>	Front Cover	Front Cover	Front Cover

Item Description	Part No.
Vertical Cable Manager, 37U, 203 (W) X 439 (D)	CMSOB0009
Vertical Cable Manager, 42U, 203 (W) X 439 (D)	CMSOB0008
Vertical Cable Manager, 45U, 203 (W) X 439 (D)	CMSOB0007



# HORIZONTAL CABLE MANAGERS

Olabs Horizontal Cable Manager provides a solution for organizing cable on any Standard 19" cabinet and to meet ANSI/TIA/EIA installation guidelines for copper and fiber cabling.

Available in 1U or 2U height with hinged cover, the cable manager provides a clean and simple means for organizing bundles of cables and to minimize the amount of space needed for network layout.



## KEY FEATURES :

- Suitable for multi-media applications using both fiber or copper cables
- Cost effective solution that simplifies network maintenance
- Made of light-weighted plastic for flexibility
- For use with front and rear of rack/cabinet
- Modular design, ease to install
- Dual hinged cover that can open to the top or bottom to allow easy access

## Specifications

Height (Rack Unit)	1U	2U
Main Material	Plastic/Metal	Plastic/Metal
Dimensions ( W x D x H )	1U x 436.6mm x 87.5mm	2U x 436.6mm x 87.5mm
Cable Capacity	52 (6.2mm Cat 6 Cable)	104 (6.2mm Cat 6 Cable)
	33 (8.0mm Cat 6A Cable)	66 (8.0mm Cat 6A Cable)
	120 (3.0mm Fiber Cable)	240 (3.0mm Fiber Cable)
	27 (9.0mm Fiber Cable)	54 (9.0mm Fiber Cable)
	14 (11.2mm Fiber Cable)	28 (11.2mm Fiber Cable)
	12 (13.5mm Fiber Cable)	24 (13.5mm Fiber Cable)
	5 (17.5 mm Fiber Cable)	10 (17.5 mm Fiber Cable)
Color	Black	Black
Compliance	RoHS, CE	RoHS, CE

Item Description	Part No. for 2 Height Options	
	1U	2U
19" Horizontal Cable Manager, Plastic, Black	CMSOC0001	CMSOC0002
19" Horizontal Cable Manager, Metal, Black	CMSOC0003	CMSOC0004



# FIBER OUTLETS

Fiber Outlet offers simple snap-in installation solution to bring connectivity to the desk.

Available with flat socket with 1-, 2-, or 3-port or 45-degree angled socket options.

All outlet is pre-load with fiber adapter with the choices of FC, SC, ST or LC.

Suitable for uses in all FTTx application include offices, schools and factories.



## KEY FEATURES :

- Flat or 45-degree angled socket with options of Single and Dual
- 86-Type design with size of 86 x 86mm
- Plastic white with aesthetical design
- Supplied with two mounting screws for installation

## Specifications

<b>Faceplate Style</b>	86-Type
<b>Faceplate Size (L x W) mm</b>	86 x 86
<b>Adaptor Module</b>	FC, SC, ST, LC
<b>Faceplate Color</b>	White
<b>Materials</b>	Plastic
<b>Socket Options</b>	Flat Socket Style with 1 Port
	Flat Socket Style with 2 Ports
	Flat Socket Style with 3 Ports
	45-degree Angled Socket

## Adapter Coloring

Adapter housing colors will be arranged in accordance with below fiber mode matrix.

Adapter	Fiber Mode					
	OS1/OS2 (APC)	OS1/OS2 (UPC)	OM1	OM2	OM3	OM4
<b>FC</b>	Metal	Metal	Metal	Metal	Metal	Metal
<b>SC</b>	Green	Blue	Beige	Beige	Aqua	Aqua
<b>ST</b>	Metal	Metal	Metal	Metal	Metal	Metal
<b>LC</b>	Green	Blue	Beige	Beige	Aqua	Aqua

# FIBER OUTLETS

## FLAT SOCKET STYLE WITH 1 PORT

Flat Socket Style with 1 port



Item Description		Part No. with Different Fiber Mode					
Types of Adapter	No. of Fiber Count	OS1/OS2 (APC)	OS1/OS2 (UPC)	OM1	OM2	OM3	OM4
FC	1	FLA1FW11SA	FLA1FW11SU	FLA1FW11M1	FLA1FW11M2	FLA1FW11M3	FLA1FW11M4
SC	1	FLA1FW21SA	FLA1FW21SU	FLA1FW21M1	FLA1FW21M2	FLA1FW21M3	FLA1FW21M4
ST	1	FLA1FW31SA	FLA1FW31SU	FLA1FW31M1	FLA1FW31M2	FLA1FW31M3	FLA1FW31M4
LC (1pc of LC Duplex)	2	FLA1FW42SA	FLA1FW42SU	FLA1FW42M1	FLA1FW42M2	FLA1FW42M3	FLA1FW42M4

## FLAT SOCKET STYLE WITH 2 PORTS

Flat Socket Style with 2 ports



Item Description		Part No. with Different Fiber Mode					
Types of Adapter	No. of Fiber Count	OS1/OS2 (APC)	OS1/OS2 (UPC)	OM1	OM2	OM3	OM4
FC	2	FLA2FW12SA	FLA2FW12SU	FLA2FW12M1	FLA2FW12M2	FLA2FW12M3	FLA2FW12M4
SC	2	FLA2FW22SA	FLA2FW22SU	FLA2FW22M1	FLA2FW22M2	FLA2FW22M3	FLA2FW22M4
ST	2	FLA2FW32SA	FLA2FW32SU	FLA2FW32M1	FLA2FW32M2	FLA2FW32M3	FLA2FW32M4
LC (2pc of LC Duplex)	4	FLA2FW44SA	FLA2FW44SU	FLA2FW44M1	FLA2FW44M2	FLA2FW44M3	FLA2FW44M4

## FLAT SOCKET STYLE WITH 3 PORTS

Flat Socket Style with 3 ports



Item Description		Part No. with Different Fiber Mode					
Types of Adapter	No. of Fiber Count	OS1/OS2 (APC)	OS1/OS2 (UPC)	OM1	OM2	OM3	OM4
FC	3	FLA3FW13SA	FLA3FW13SU	FLA3FW13M1	FLA3FW13M2	FLA3FW13M3	FLA3FW13M4
SC	3	FLA3FW23SA	FLA3FW23SU	FLA3FW23M1	FLA3FW23M2	FLA3FW23M3	FLA3FW23M4
ST	3	FLA3FW33SA	FLA3FW33SU	FLA3FW33M1	FLA3FW33M2	FLA3FW33M3	FLA3FW33M4
LC (3pc of LC Duplex)	6	FLA3FW46SA	FLA3FW46SU	FLA3FW46M1	FLA3FW46M2	FLA3FW46M3	FLA3FW46M4

## 45 DEGREE ANGLED SOCKET STYLE WITH 1 PORT

45 Degree Angled Socket Style with 1 port



Item Description		Part No. with Different Fiber Mode					
Types of Adapter	No. of Fiber Count	OS1/OS2 (APC)	OS1/OS2 (UPC)	OM1	OM2	OM3	OM4
SC (1pc of SC Duplex)	2	FLA1AW22SA	FLA1AW22SU	FLA1AW22M1	FLA1AW22M2	FLA1AW22M3	FLA1AW22M4
LC (1pc LC Quad)	4	FLA1AW44SA	FLA1AW44SU	FLA1AW44M1	FLA1AW44M2	FLA1AW44M3	FLA1AW44M4

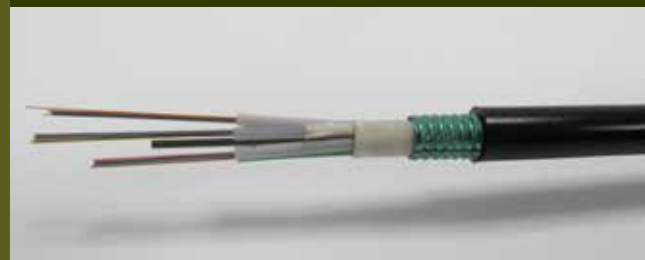
# RUGGEDIZED / HARSH ENVIRONMENT FIBER CONNECTIVITY

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Olabs FiberTough™ Harsh Environment Fiber Connectivity Solution offers UTMOST protection for your network

Olabs delivers a full range of value-added cable management solutions for maximizing performance and protection of network cabling in virtually all harsh environments.

From Outdoor Fiber Cables, Armored Patchcords, IP68 Cable Assemblies to Outdoor Enclosures and Cabinets, our ruggedized harsh environment solution delivers distinct performance in robustness and reliability which ensures the stability and durability of your network system.



## **TACTICAL FIELD DEPLOYABLE FIBER SOLUTIONS**

P.130 | Tactical Field Deployable Fiber Solutions

## **IP68 MPO & LC ASSEMBLIES**

P.132 | IP68 MPO Assemblies

P.134 | IP68 LC Assemblies

## **OUTDOOR IP WALLMOUNTS**

P.136 | Outdoor IP Wallmounts

## **OUTDOOR CABINETS WITH AIR-CONDITIONING UNIT**

P.138 | Outdoor Cabinets with Air-Conditioning Unit

## **OUTDOOR FIBER CABLES**

P.140 | Central Strength Member Armored Cables

P.141 | Steel Armored Cables

## **ARMORED PATCHCORDS**

P.142 | Armored Patchcords

# TACTICAL FIELD DEPLOYABLE FIBER SOLUTIONS

Pre-terminated tactical cable assemblies are offered in standard length options of 200, 300 or 500 meters and pre-coiled onto a ruggedized portable wheel with roller. Available for 4- or 6-Fiber with customer specified fiber mode and choices of different connector interfaces include FC, SC, ST and LC.

## KEY FEATURES :

- Made of tactical fiber optic cable which is oil-resistant, flame-retardant with high tensile and crash resistance
- Comprehensive range of pre-terminated configurations in 4- or 6-Fiber in Singlemode or Multimode
- Various connector interfaces for choices (FC, SC, ST, LC)
- Supplied on high quality portable reel with roller for easy installation and deployment
- Suitable for harsh environments where repeated deployment and retrieval for reuse is needed
- Factory terminated and factory tested to ensure superior optical performance



## Specifications - Cable


Fiber Count Options	4-Fiber	6-Fiber
Outer Diameter (mm)	5.0 ± 0.2	5.5 ± 0.2
Cable Weight	25Kgs/Km	30Kgs/Km
Tight Buffer	900µm	900µm
Tension Load (N)	1300	1500
Crush Resistance (N/10cm)	1000	1100
Impact (N*m)	4.5	4.5
Repeatedly Bending (times)	1000 (R=50mm)	1000 (R=55mm)
Typical Fiber Attenuation (dB/Km)	Singlemode : 1310nm ≤ 0.5dB 1550nm ≤ 0.4dB	Singlemode : 1310nm ≤ 0.5dB 1550nm ≤ 0.4dB
	Multimode : 850nm ≤ 3.2dB 1300nm ≤ 1.0dB	Multimode : 850nm ≤ 3.2dB 1300nm ≤ 1.0dB
Operating Temperature	- 45°C to + 70°C	- 45°C to + 70°C
Compliance	IEC 60332	IEC 60332


## Specifications - Pre-terminated Assemblies & Reel Dimensions


Items & Parameters	Length of Cable Assembly per Drum		
	200 meters	300 meters	500 meters
Reel Diameter (ø in mm)	320	400	450
Frame	Length (mm)	420	480
	Width (mm)	310	360
	Height (mm)	450	500
Overall Weight (Kgs)	4-Fiber Options	12	16.5
	6-Fiber Options	13	18
			23
			25.5


# TACTICAL FIELD DEPLOYABLE FIBER SOLUTIONS

## 4-FIBER OPTIONS

FC to FC		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP4FCUS1T-xxxM	
OM1	FP4FCPM1T-xxxM	
OM2	FP4FCPM2T-xxxM	
OM3	FP4FCPM3T-xxxM	
OM4	FP4FCPM4T-xxxM	


SC to SC		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP4SCUS1T-xxxM	
OM1	FP4SCPM1T-xxxM	
OM2	FP4SCPM2T-xxxM	
OM3	FP4SCPM3T-xxxM	
OM4	FP4SCPM4T-xxxM	


ST to ST		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP4STUS1T-xxxM	
OM1	FP4STPM1T-xxxM	
OM2	FP4STPM2T-xxxM	
OM3	FP4STPM3T-xxxM	
OM4	FP4STPM4T-xxxM	


LC to LC		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP4LCUS1T-xxxM	
OM1	FP4LCPM1T-xxxM	
OM2	FP4LCPM2T-xxxM	
OM3	FP4LCPM3T-xxxM	
OM4	FP4LCPM4T-xxxM	


[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits

## 6-FIBER OPTIONS

FC to FC		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP6FCUS1T-xxxM	
OM1	FP6FCPM1T-xxxM	
OM2	FP6FCPM2T-xxxM	
OM3	FP6FCPM3T-xxxM	
OM4	FP6FCPM4T-xxxM	

SC to SC		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP6SCUS1T-xxxM	
OM1	FP6SCPM1T-xxxM	
OM2	FP6SCPM2T-xxxM	
OM3	FP6SCPM3T-xxxM	
OM4	FP6SCPM4T-xxxM	

ST to ST		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP6STUS1T-xxxM	
OM1	FP6STPM1T-xxxM	
OM2	FP6STPM2T-xxxM	
OM3	FP6STPM3T-xxxM	
OM4	FP6STPM4T-xxxM	

LC to LC		
Fiber Mode	Part No. <sup>(1)</sup>	
OS1/2	FP6LCUS1T-xxxM	
OM1	FP6LCPM1T-xxxM	
OM2	FP6LCPM2T-xxxM	
OM3	FP6LCPM3T-xxxM	
OM4	FP6LCPM4T-xxxM	

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits

# IP68 MPO ASSEMBLIES

This IP68 MPO cable assembly supports multi-fiber cable routing in virtually any extreme environments, such as FTTA, base stations, transportation and railway systems, as well as industry networks.

Sealed to IP68 with reliable bayonet locking design feature, the assembly assures excellent optical performance and support utmost protection in harsh environment.

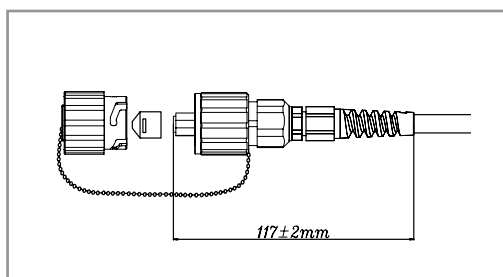
Available in standard MPO or Low Loss-MPO connector with IP68 outer housing, customer can specify cable length and fiber mode to fit for their unique needs.



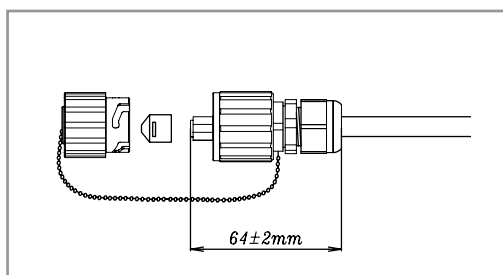
## KEY FEATURES :

- Connector interface available in Standard MPO or Low Loss-MPO
- Sealed to IP68 for utmost protection
- Bayonet locking design makes ease of mating even in inconvenient locations
- Receptacle of different flange styles to fit for different installation needs
- Fiber optic connector complies to Telcordia GR-326-CORE and TIA/EIA standards
- Comprehensive assemblies solutions reduce cost of site termination while enhanced performance

### ASSEMBLY WITH REGULAR BOOT



### ASSEMBLY WITH SHORT BOOT



## Specifications

<b>Fiber Count Option</b>	12-Fiber
<b>Cable and Cable Jacket</b>	Tactical Cable with Thermoplastic PolyUrethane Jacket
<b>Connector Options</b>	Standard MPO (Male or Female) Low Loss MPO (Male or Female)
<b>Boot Options</b>	Regular Boot (Overall length includes connector plug : 117mm) Short Boot (Overall length includes connector plug : 64mm)
<b>Receptacle Flange Types</b>	Hexagon Flange Square Flange
<b>Available Fiber Modes</b>	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Ingress Protection</b>	IP68
<b>Mating Mechanism</b>	Bayonet
<b>Mechanical Performance</b>	Straight Pulling Force 25Kgs
<b>Mating Durability</b>	500 Mating Cycles
<b>Operating Temperature</b>	- 40°C to + 70°C
<b>Compliance</b>	RoHS , Telcordia GR-326-CORE and TIA/EIA Standards

## Optical Performance

Connector & Fiber Mode		Insertion Loss	Return Loss
<b>Standard MPO</b>	<b>Singlemode</b>	≤ 0.75dB (Typical - 0.25dB)	UPC ≥ 60dB
	<b>Multimode</b>	≤ 0.6dB (Typical - 0.20dB)	PC ≥ 20dB
<b>Low Loss MPO</b>	<b>Singlemode</b>	≤ 0.35dB	UPC ≥ 60dB
	<b>Multimode</b>	(Typical - 0.10dB)	PC ≥ 20dB



# IP68 MPO ASSEMBLIES

## STANDARD MPO ASSEMBLY

IP68 Standard MPO to MPO 12-Fiber Assembly

Fiber Mode	Part No. <sup>[1], [2]</sup>			
	MPO-Male to Male		MPO-Female to Female	
	with Regular Boot	with Short Boot	with Regular Boot	with Short Boot
OS1	IP1MMMM1S1BT-xxxM	IP1MMMM2S1BT-xxxM	IP1MFMF1S1BT-xxxM	IP1MFMF2S1BT-xxxM
OM1	IP1MMMM1M1BT-xxxM	IP1MMMM2M1BT-xxxM	IP1MFMF1M1BT-xxxM	IP1MFMF2M1BT-xxxM
OM2	IP1MMMM1M2BT-xxxM	IP1MMMM2M2BT-xxxM	IP1MFMF1M2BT-xxxM	IP1MFMF2M2BT-xxxM
OM3	IP1MMMM1M3BT-xxxM	IP1MMMM2M3BT-xxxM	IP1MFMF1M3BT-xxxM	IP1MFMF2M3BT-xxxM
OM4	IP1MMMM1M4BT-xxxM	IP1MMMM2M4BT-xxxM	IP1MFMF1M4BT-xxxM	IP1MFMF2M4BT-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits  
 [2] Please specify if you need different boot styles in 2 ends

## LOW LOSS MPO ASSEMBLY

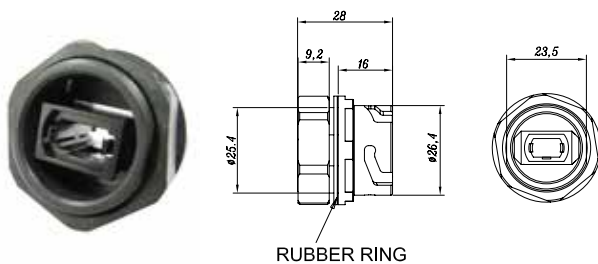
IP68 Low Loss MPO to MPO 12-Fiber Assembly

Fiber Mode	Part No. <sup>[1], [2]</sup>			
	Low Loss MPO-Male to Male		Low Loss MPO-Female to Female	
	with Regular Boot	with Short Boot	with Regular Boot	with Short Boot
OS1	IP1EMEM1S1BT-xxxM	IP1EMEM2S1BT-xxxM	IP1EFEF1S1BT-xxxM	IP1EFEF2S1BT-xxxM
OM1	IP1EMEM1M1BT-xxxM	IP1EMEM2M1BT-xxxM	IP1EFEF1M1BT-xxxM	IP1EFEF2M1BT-xxxM
OM2	IP1EMEM1M2BT-xxxM	IP1EMEM2M2BT-xxxM	IP1EFEF1M2BT-xxxM	IP1EFEF2M2BT-xxxM
OM3	IP1EMEM1M3BT-xxxM	IP1EMEM2M3BT-xxxM	IP1EFEF1M3BT-xxxM	IP1EFEF2M3BT-xxxM
OM4	IP1EMEM1M4BT-xxxM	IP1EMEM2M4BT-xxxM	IP1EFEF1M4BT-xxxM	IP1EFEF2M4BT-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits  
 [2] Please specify if you need different boot styles in 2 ends

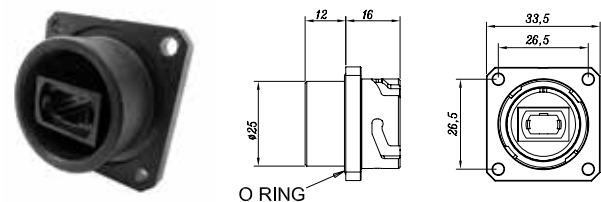
## RECEPTACLE OPTIONS

IP68 Receptacle with MPO Adapter, Hexagon Flange



Part No.: IP3MA3H

IP68 Receptacle with MPO Adapter, Square Flange



Part No.: IP3MA3S

# IP68 LC ASSEMBLIES

This IP68 LC cable assembly supports fiber cabling in virtually any extreme environments, such as FTTH, base stations, transportation and railway systems, as well as industry networks.

Sealed to IP68 with reliable bayonet locking design feature, the assembly assures excellent optical performance and support utmost protection in harsh environment.

Available in Duplex LC connector with IP68 outer housing, customer can specify cable length and fiber mode to fit for their unique needs.



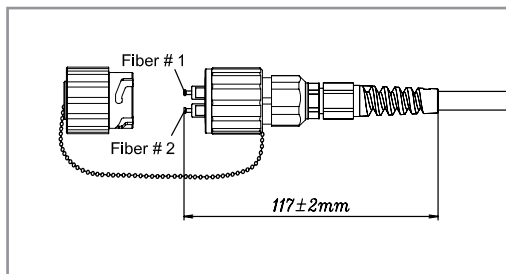
## KEY FEATURES :

- Standard Duplex LC connector interface
- Sealed to IP68 for utmost protection
- Bayonet locking design makes ease of mating even in inconvenient locations
- Receptacle of different flange styles to fit for different installation needs
- Fiber optic connector complies to Telcordia GR-326-CORE and TIA/EIA standards
- Comprehensive assemblies solutions reduce cost of site termination while enhanced performance

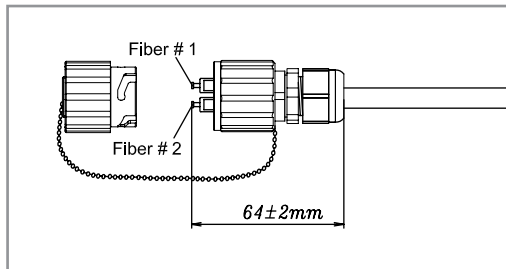
## Specifications

<b>Fiber Count Option</b>	2-Fiber
<b>Cable and Cable Jacket</b>	Tactical Cable with Thermoplastic PolyUrethane jacket
<b>Connector Option</b>	Duplex LC
<b>Boot Options</b>	Regular Boot (Overall length includes connector plug : 117mm) Short Boot (Overall length includes connector plug : 64mm)
<b>Receptacle Flange Types</b>	Hexagon Flange Square Flange
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Ingress Protection</b>	IP68
<b>Mating Mechanism</b>	Bayonet
<b>Mechanical Performance</b>	Straight Pulling Force 25Kgs
<b>Mating Durability</b>	500 Mating Cycles
<b>Operating Temperature</b>	- 40°C to + 70°C
<b>Compliance</b>	RoHS , Telcordia GR-326-CORE and TIA/EIA Standards

### ASSEMBLY WITH REGULAR BOOT



### ASSEMBLY WITH SHORT BOOT



## Optical Performance

Connector & Fiber Mode	Insertion Loss	Return Loss
Standard LC	Singlemode	UPC ≥ 55dB
	Multimode	(Typical - 0.1dB) PC ≥ 25dB

# IP68 LC ASSEMBLIES

## ASSEMBLIES OPTIONS

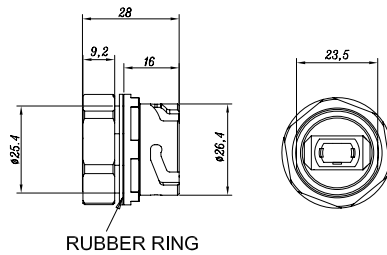
### IP68 LC to LC Duplex Assembly

Fiber Mode	Part No. <sup>[1], [2]</sup>	
	with Regular Boot	with Short Boot
OS1	IP1LCLC1S1AT-xxxM	IP1LCLC2S1AT-xxxM
OM1	IP1LCLC1M1AT-xxxM	IP1LCLC2M1AT-xxxM
OM2	IP1LCLC1M2AT-xxxM	IP1LCLC2M2AT-xxxM
OM3	IP1LCLC1M3AT-xxxM	IP1LCLC2M3AT-xxxM
OM4	IP1LCLC1M4AT-xxxM	IP1LCLC2M4AT-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits  
 [2] Please specify if you need different boot style in 2 ends

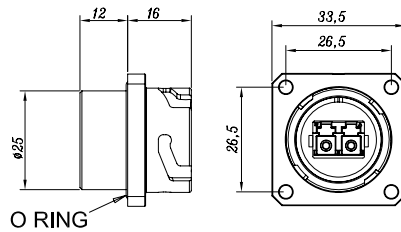
## RECEPTACLE OPTIONS

### IP68 Receptacle with LC Adapter, Hexagon Flange



Fiber Mode	Part No.
OS1/2	IP3LA1H
OM1 ~ OM4	IP3LA2H

### IP68 Receptacle with LC Adapter, Square Flange



Fiber Mode	Part No.
OS1/2	IP3LA1S
OM1 ~ OM4	IP3LA2S

# OUTDOOR IP WALLMOUNTS

This IP65 Wallmount Panel delivers superior durability and utmost protection to satisfy all your wallmount cable management needs in outdoor environments.

The panel accepts wallmount faceplates in Size-C (28H x 155mm), customer can flexibly bundle the inside faceplates with choice of adapters to cater for different installation needs.



## KEY FEATURES :

- Up to 96-Fiber capacity
- Suitable for housing with Size-C faceplate in Page 93
- Flexible design to support patching or splicing
- Available in FC, SC, ST or LC configuration
- Special wall mounting welded brackets for easy installation
- Lockable door with key for securing your equipment

## Specifications

<b>Ingress Protection</b>	IP65
<b>Support Applications</b>	Patching: Supplied with Cable Management Spools Splicing: Supplied with Splice Tray Kits
<b>Main Material</b>	Steel
<b>Dimension (W x H x D) mm</b>	500 x 400 x 200
<b>Max. nos. of Facplates to be housed</b>	8pcs
<b>Accommodate Faceplate Size (H x W) mm</b>	28 x 155
<b>Available Interfaces</b>	FC, SC, ST, LC
<b>Fiber Capacity per Panel</b>	12-, 24-, 36-, 48-, 96-Fiber
<b>Available Fiber Modes</b>	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Compliance</b>	RoHS , IEC 60529
<b>Operating Temperature</b>	- 40°C to + 60°C
<b>Coating and Color</b>	Beige Powder Coating
<b>Preloaded Units</b>	1. Adapter Faceplate (Size-C: 28 x 155mm) 2. Cable Management Spool 3. Door Lock and Key 4. Splicing Kit (for Splicing model only)

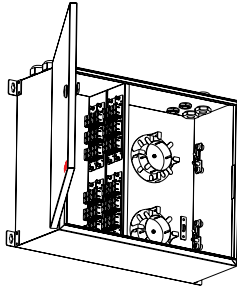
## Fiber Capacity for Different Types of Interface

Fiber Capacity per Panel	Type of Interface			
	FC	SC	ST	LC
<b>12-Fiber</b>	✓	✓	✓	✓
<b>24-Fiber</b>	✓	✓	✓	✓
<b>36-Fiber</b>	✓	✓	✓	✓
<b>48-Fiber</b>	✓	✓	✓	✓
<b>96-Fiber</b>	N/A	N/A	N/A	✓

# OUTDOOR IP WALLMOUNTS

## LOADED OPTIONS (PRE-LOADED WITH ADAPTER FACEPLATES)

### IP65 Wallmount Panel for Patching, Loaded

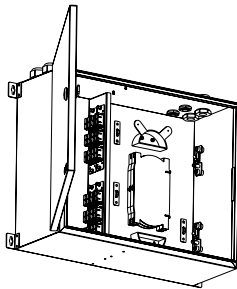


Example of 96-Fiber SC, Patching  
P/N: IWP6-08-Cxxxx

Item Description		Part No. <sup>(1), (2)</sup>
Fiber Count	Nos. of Faceplate to be loaded	
12-Fiber	1	IWP6-01-Cxxxx
24-Fiber	2	IWP6-02-Cxxxx
36-Fiber	3	IWP6-03-Cxxxx
48-Fiber	4	IWP6-04-Cxxxx
96-Fiber	8	IWP6-08-Cxxxx

(1) "Cxxxx" refers to the selection of Faceplate, please select from Page 93 ~ 95 to complete the Part No.  
 (2) Excess faceplate slots can be covered with blind plates, you may order blind plates separately by referring to Page 93 ~ 95  
 (3) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment

### IP65 Wallmount Panel for Splicing, Loaded



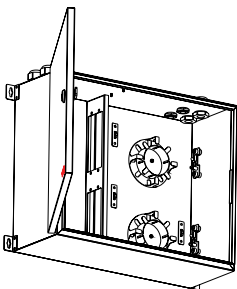
Example of 48-Fiber SC, Splicing  
P/N: IWS6-04-Cxxxx

Item Description		Part No. <sup>(1), (2)</sup>
Fiber Count	Nos. of Faceplate to be loaded	
12-Fiber	1	IWS6-01-Cxxxx
24-Fiber	2	IWS6-02-Cxxxx
36-Fiber	3	IWS6-03-Cxxxx
48-Fiber	4	IWS6-04-Cxxxx
96-Fiber	8	IWS6-08-Cxxxx

(1) "Cxxxx" refers to the selection of Faceplate, please select from Page 93 ~ 95 to complete the Part No.  
 (2) Excess faceplate slots can be covered with blind plates, you may order blind plates separately by referring to Page 93 ~ 95  
 (3) When adapter faceplates are ordered in a bundle with enclosure, it will be pre-loaded into the enclosure for shipment

## UNLOADED OPTIONS (WITHOUT ADAPTER FACEPLATES)

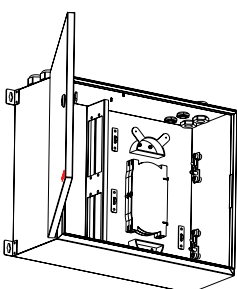
### IP65 Wallmount Panel for Patching, Unloaded



Item Description		Part No.
Fiber Count	Nos. of Faceplate to be loaded	
N/A	0	IWP6

\* This panel is supplied with cable management spools for inside cable management, customer can flexibly select the adapter faceplates from Page 93 ~ 95  
 \*\* When adapter faceplates are to be ordered separately with individual Part No. as in Page 93 ~ 95, the adapter faceplates will be packed and shipped separately

### IP65 Wallmount Panel for Splicing, Unloaded



Item Description		Part No.
Fiber Count	Nos. of Faceplate to be loaded	
N/A	0	IWS6

\* This panel is supplied with fiber splice tray for inside fiber splicing, customer can flexibly select the adapter faceplates from Page 93 ~ 95  
 \*\* When adapter faceplates are to be ordered separately with individual Part No. as in Page 93 ~ 95, the adapter faceplates will be packed and shipped separately

# OUTDOOR CABINETS WITH AIR-CONDITIONING UNIT

IP55 Outdoor Cabinet with air-conditioning unit provides utmost protection on cables and equipment while delivering extra cooling function for harsh environment applications.

Suitable for housing any 19" EIA standard equipment or patch panels in 15U capacity, this cabinet is designed with ruggedized structure with optional smoke sensor and door lock sensor for achieving the highest protection level.



## KEY FEATURES :

- Ruggedized structure with IP55 ingress protection
- Pre-installed with air-conditioning unit with cooling capacity of 300W/1024Btu/h
- Level of noise of the air-conditioning unit compliant to ISO3744
- 3-point door lock and optional door lock sensor provide extra security to restrict unauthorized access
- Optional smoke sensor for alerting unexpected combustion
- Optional rings could be installed on the top plate to facilitate hanging deployment or delivery

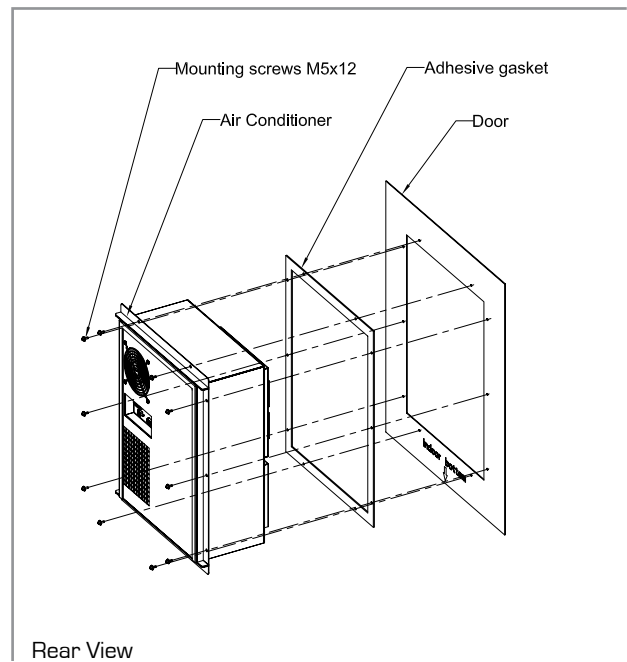
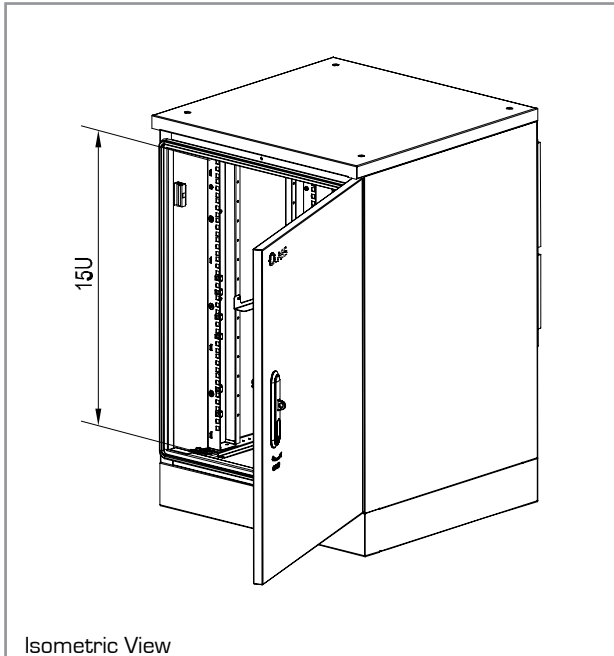
### Specifications - Outdoor Cabinet

<b>Main Material</b>	Steel
<b>Dimension (H x W x D) mm</b>	900 x 600 x 600
<b>Net Weight (Kgs)</b>	50
<b>Compliance</b>	RoHS
<b>Ingress Protection</b>	IP55 (GB4208)
<b>Operating Temperature</b>	- 40°C to + 55°C
<b>Optional Accessories</b>	Smoke Sensor, Door Lock Sensor, Hanging Rings (x 4pcs)

### Specifications - Air-Conditioning Unit to be Pre-installed

<b>Dimensions (H x W X D) mm</b>	523.5 x 405 x 203
<b>Net Weight (Kgs)</b>	20
<b>Noise (dBA)</b>	< 53 dBA
<b>Cooling Capacity</b>	300W/1024Btu/h
<b>Compliance</b>	RoHS, ISO3744
<b>Operating Temperature</b>	- 40°C to + 55°C

# OUTDOOR CABINETS WITH AIR-CONDITIONING UNIT



Item Description	Part No.
IP55 Outdoor Cabinet with Air-conditioning Unit, 15U	IPA15U1B



# CENTRAL STRENGTH MEMBER ARMORED CABLES

Armored fiber optic cable in stranded loose tube structure which withstands high tensile stresses and provides protection from rodents.

Offered in 2- to 144-Fiber count, available in singlemode (OS1/OS2) and multimode (OM1, OM2, OM3, OM4) with LSZH or PE jacket.



## KEY FEATURES :

- Suitable for all outdoor and harsh environment applications
- Extra thickness on outer jacket withstand strong pressure and tensile stresses
- Corrugated steel tape design offers extra mechanical and rodent protection
- Wide range of fiber count options from 2- to 144-Fiber
- Loose tube design provides outstanding optical fiber protection

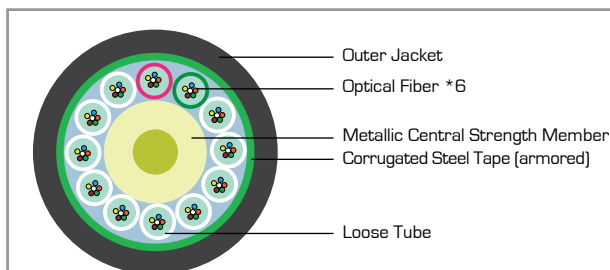
## Specifications

<b>Fiber Count Options</b>	2, 4, 6, 8, 12, 24, 48, 72, 96, 144-Fiber
<b>Available Fiber Modes</b>	Singlemode (OS1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Polyethylene (PE) Low Smoke Zero Halogen (LSZH)
<b>Material of Central Strength Member</b>	Steel
<b>Temperature Range</b>	Storage or Transportation : - 40°C to + 70°C Operation : - 40°C to + 70°C

## Specifications - Mechanical Parameters

	Fiber Count			
	2~48-Fiber	72-Fiber	96-Fiber	144-Fiber
<b>Outer Diameter (mm)</b>	10.5 ± 0.5	11.5 ± 0.5	13.0 ± 0.5	15.8 ± 0.5
<b>Nos. of Tube per Cable</b>	5	6	8	12
<b>Nominal Weight (Kg/Km)</b>	160	199	238	295
<b>Max. Tension (N)</b>	<b>Short-term</b>	1500	3000	3000
	<b>Long-term</b>	600	1000	1000
<b>Max. Crushing</b>	<b>Short-term</b>	1000	1000	1000
<b>Resistance (N/100)</b>	<b>Long-term</b>	300	300	300

## CABLE CROSS SECTION DIAGRAM



Example of 72-Fiber Central Strength Member Armored Cable, OS1/2, LSZH  
P/N: FC07-072S1L

## Central Strength Member Armored Cable

Fiber Mode	Part No. <sup>(1)</sup>	
	PE Jacket	LSZH Jacket
OS1/2	FC07-xxxS1E	FC07-xxxS1L
OM1	FC07-xxxM1E	FC07-xxxM1L
OM2	FC07-xxxM2E	FC07-xxxM2L
OM3	FC07-xxxM3E	FC07-xxxM3L
OM4	FC07-xxxM4E	FC07-xxxM4L

(1) "xxx" refers to nos. of fiber count, options available are "002", "004", "006", "008", "012", "024", "048", "072", "096", "144".

# STEEL ARMORED CABLES

Featuring two steel strength members with corrugated steel tape, the steel armored cable is offered with options of 2- to 24-Fiber in either PE or LSZH jacket.

Fiber choices of singlemode (OS1/OS2), and multimode (OM1, OM2, OM3, OM4) to fit for different installation.



## KEY FEATURES :

- Suitable for cable deployment in aerial and duct areas
- 2 ruggedized steel wires for self-support function
- Water blocking tape provides added ingress protection
- Corrugated steel tape delivers superior crush and rodent resistant
- Small diameter, light weight for easy laying
- Excellent durability and long service life

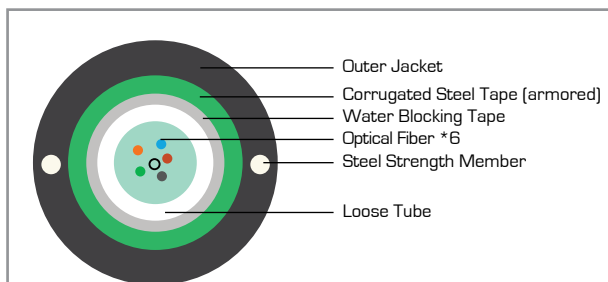
## Specifications

<b>Fiber Count Options</b>	2, 4, 6, 8, 12, 24-Fiber
<b>Available Fiber Modes</b>	Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>	Polyethylene (PE) Low Smoke Zero Halogen (LSZH)
<b>Material of Two Strength Member</b>	Steel
<b>Temperature Range</b>	Storage or Transportation : - 40°C to + 70°C Operation : - 40°C to + 70°C

## Specifications - Mechanical Parameters

		Fiber Count	
		2 ~ 12-Fiber	24-Fiber
<b>Outer Diameter (mm)</b>		8.0 ± 0.3	8.8 ± 0.3
<b>Nominal Weight (Kg/Km)</b>	<b>LSZH Jacket</b>	85	105
	<b>PE Jacket</b>	62	74
<b>Max. Tension (N)</b>	<b>Short-term</b>	1500	1500
	<b>Long-term</b>	500	500
<b>Max. Crushing Resistance (N/100)</b>	<b>Short-term</b>	3000	3000
	<b>Long-term</b>	1000	1000

## CABLE CROSS SECTION DIAGRAM



Example of 6-Fiber Steel Armored Cable, OM1, LSZH  
P/N: FC06-006M1L

## Steel Armored Cable

Fiber Mode	Part No. <sup>(1)</sup>	
	PE Jacket	LSZH Jacket
OS1/2	FC06-xxxS1E	FC06-xxxS1L
OM1	FC06-xxxM1E	FC06-xxxM1L
OM2	FC06-xxxM2E	FC06-xxxM2L
OM3	FC06-xxxM3E	FC06-xxxM3L
OM4	FC06-xxxM4E	FC06-xxxM4L

(1) "xxx" refers to nos. of fiber count, options available are "002", "004", "006", "008", "012", "024".

# ARMORED PATCHCORDS

Ruggedized design armored fiber optic patchcord with stainless steel tube inside the outer cable jacket for extra protection on inner fiber.

This patchcord with stronger cable structure is suitable for outdoor cabling installation that provides higher pressure resistance and rodent protection.

Make according to customer specified length and fiber mode with choices of all connector types include FC, SC, ST, LC and E2000.



## KEY FEATURES :

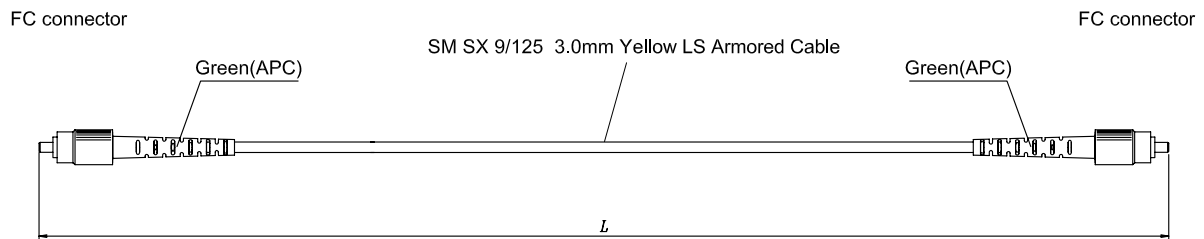
- Higher durability and longer service life from strong pressure resistance
- Protects from rodents with the strong cable structure
- Good cable bending flexibility for easy installation
- All connector choices are available including FC, SC, ST, LC and E2000

## Specifications

<b>Cable Structure</b>		Simplex Armored Cable with OD: 3.0mm (+/- 0.15mm) Duplex Armored Cable with OD: 3.0 x 6.0mm (+/- 0.15mm)
<b>Connector Types</b>		FC/SC/ST/LC/MU/E2000
<b>Available Fiber Modes</b>		Singlemode (OS 1/2) Multimode (OM1, OM2, OM3, OM4)
<b>Jacket Material Options</b>		Riser (OFNR) Low Smoke Zero Halogen (LSZH)
<b>Jacket Color</b>	<b>Singlemode</b>	OS1/OS2: Blue
	<b>Multimode</b>	OM1, 2, 3, 4: Grey
<b>Optical Performance</b>	<b>Singlemode at 1310nm</b>	IL ≤ 0.3dB (Typical 0.1dB) RL ≥ 55dB (UPC) , ≥ 65dB (APC)
	<b>Multimode at 850nm</b>	IL ≤ 0.3dB (Typical 0.1dB) RL ≥ 25dB
<b>Operating Temperature</b>		- 20°C to + 60°C
<b>Maximum Tension</b>		300N (Short Term) 150N (Long Term)
<b>Fiber Attenuation</b>	<b>Singlemode</b>	1310nm: 0.4dB/Km 1550nm: 0.25dB/Km
	<b>Multimode</b>	850nm: 3.0dB/Km 1300nm: 1.0dB/Km
<b>Minimum Bending Radius</b>		≥ 30D

# ARMORED PATCHCORDS

## SIMPLEX ARMORED PATCHCORD



Example of Simplex Armored Patchcord - FC to FC, OS1/2, APC, LSZH, 5M  
P/N: ARS11AS1L-005M

### FC to FC Simplex



Item Description		Part No. <sup>(1), (2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARS11AS1R-xxxM	ARS11AS1L-xxxM
OS1/2	UPC	ARS11US1R-xxxM	ARS11US1L-xxxM
OM1	PC	ARS11PM1R-xxxM	ARS11PM1L-xxxM
OM2	PC	ARS11PM2R-xxxM	ARS11PM2L-xxxM
OM3	PC	ARS11PM3R-xxxM	ARS11PM3L-xxxM
OM4	PC	ARS11PM4R-xxxM	ARS11PM4L-xxxM

### ST to ST Simplex



Item Description		Part No. <sup>(1), (2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARS22AS1R-xxxM	ARS22AS1L-xxxM
OS1/2	UPC	ARS22US1R-xxxM	ARS22US1L-xxxM
OM1	PC	ARS22PM1R-xxxM	ARS22PM1L-xxxM
OM2	PC	ARS22PM2R-xxxM	ARS22PM2L-xxxM
OM3	PC	ARS22PM3R-xxxM	ARS22PM3L-xxxM
OM4	PC	ARS22PM4R-xxxM	ARS22PM4L-xxxM

### SC to SC Simplex



Item Description		Part No. <sup>(1), (2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARS33AS1R-xxxM	ARS33AS1L-xxxM
OS1/2	UPC	ARS33US1R-xxxM	ARS33US1L-xxxM
OM1	PC	ARS33PM1R-xxxM	ARS33PM1L-xxxM
OM2	PC	ARS33PM2R-xxxM	ARS33PM2L-xxxM
OM3	PC	ARS33PM3R-xxxM	ARS33PM3L-xxxM
OM4	PC	ARS33PM4R-xxxM	ARS33PM4L-xxxM

[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits  
[2] Please specify if you need different connector in 2 ends

# ARMORED PATCHCORDS

## SIMPLEX ARMORED PATCHCORD

### LC to LC Simplex



Item Description		Part No. <sup>(1), (2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARS44AS1R-xxxM	ARS44AS1L-xxxM
OS1/2	UPC	ARS44US1R-xxxM	ARS44US1L-xxxM
OM1	PC	ARS44PM1R-xxxM	ARS44PM1L-xxxM
OM2	PC	ARS44PM2R-xxxM	ARS44PM2L-xxxM
OM3	PC	ARS44PM3R-xxxM	ARS44PM3L-xxxM
OM4	PC	ARS44PM4R-xxxM	ARS44PM4L-xxxM

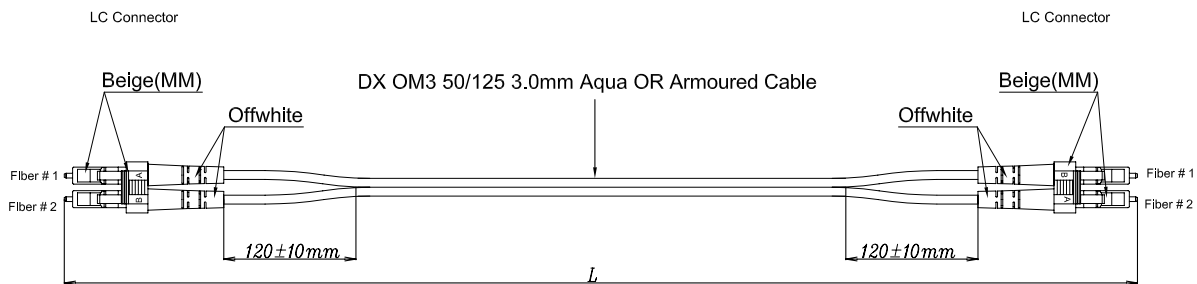
### E2000 to E2000 Simplex



Item Description		Part No. <sup>(1), (2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARS55AS1R-xxxM	ARS55AS1L-xxxM
OS1/2	UPC	ARS55US1R-xxxM	ARS55US1L-xxxM
OM1	PC	ARS55PM1R-xxxM	ARS55PM1L-xxxM
OM2	PC	ARS55PM2R-xxxM	ARS55PM2L-xxxM
OM3	PC	ARS55PM3R-xxxM	ARS55PM3L-xxxM
OM4	PC	ARS55PM4R-xxxM	ARS55PM4L-xxxM

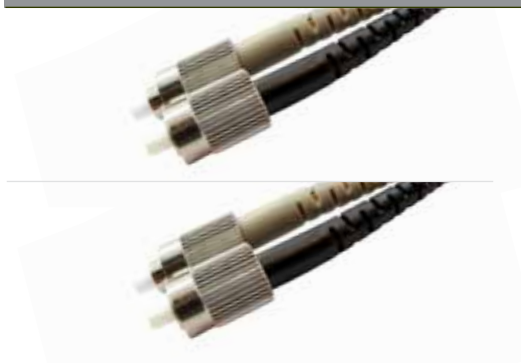
(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits  
 (2) Please specify if you need different connector in 2 ends

## DUPLEX ARMORED PATCHCORD



Example of Duplex Armored Patchcord - LC to LC, OM3, PC, OFNR, 10M  
 P/N: ARD44PM3R-010M

### FC to FC Duplex



Item Description		Part No. <sup>(1), (2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARD11AS1R-xxxM	ARD11AS1L-xxxM
OS1/2	UPC	ARD11US1R-xxxM	ARD11US1L-xxxM
OM1	PC	ARD11PM1R-xxxM	ARD11PM1L-xxxM
OM2	PC	ARD11PM2R-xxxM	ARD11PM2L-xxxM
OM3	PC	ARD11PM3R-xxxM	ARD11PM3L-xxxM
OM4	PC	ARD11PM4R-xxxM	ARD11PM4L-xxxM

(1) "xxx" refers to cable length in meter, please fill up your required length by 3 digits  
 (2) Please specify if you need different connector in 2 ends

# ARMORED PATCHCORDS

## ST to ST Duplex



Item Description		Part No. <sup>(1),(2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARD22AS1R-xxxM	ARD22AS1L-xxxM
OS1/2	UPC	ARD22US1R-xxxM	ARD22US1L-xxxM
OM1	PC	ARD22PM1R-xxxM	ARD22PM1L-xxxM
OM2	PC	ARD22PM2R-xxxM	ARD22PM2L-xxxM
OM3	PC	ARD22PM3R-xxxM	ARD22PM3L-xxxM
OM4	PC	ARD22PM4R-xxxM	ARD22PM4L-xxxM

## SC to SC Duplex



Item Description		Part No. <sup>(1),(2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARD33AS1R-xxxM	ARD33AS1L-xxxM
OS1/2	UPC	ARD33US1R-xxxM	ARD33US1L-xxxM
OM1	PC	ARD33PM1R-xxxM	ARD33PM1L-xxxM
OM2	PC	ARD33PM2R-xxxM	ARD33PM2L-xxxM
OM3	PC	ARD33PM3R-xxxM	ARD33PM3L-xxxM
OM4	PC	ARD33PM4R-xxxM	ARD33PM4L-xxxM

## LC to LC Duplex



Item Description		Part No. <sup>(1),(2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARD44AS1R-xxxM	ARD44AS1L-xxxM
OS1/2	UPC	ARD44US1R-xxxM	ARD44US1L-xxxM
OM1	PC	ARD44PM1R-xxxM	ARD44PM1L-xxxM
OM2	PC	ARD44PM2R-xxxM	ARD44PM2L-xxxM
OM3	PC	ARD44PM3R-xxxM	ARD44PM3L-xxxM
OM4	PC	ARD44PM4R-xxxM	ARD44PM4L-xxxM

## E2000 to E2000 Duplex



Item Description		Part No. <sup>(1),(2)</sup>	
Fiber Mode	End-face Polishing	Outer Jacket Material	
		OFNR Jacket	LSZH Jacket
OS1/2	APC (8 Degree)	ARD55AS1R-xxxM	ARD55AS1L-xxxM
OS1/2	UPC	ARD55US1R-xxxM	ARD55US1L-xxxM
OM1	PC	ARD55PM1R-xxxM	ARD55PM1L-xxxM
OM2	PC	ARD55PM2R-xxxM	ARD55PM2L-xxxM
OM3	PC	ARD55PM3R-xxxM	ARD55PM3L-xxxM
OM4	PC	ARD55PM4R-xxxM	ARD55PM4L-xxxM

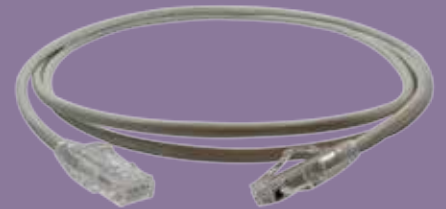
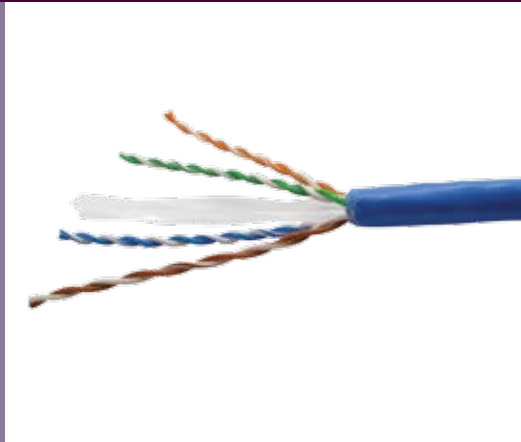
[1] "xxx" refers to cable length in meter, please fill up your required length by 3 digits  
 [2] Please specify if you need different connector in 2 ends



# COPPER NETWORK CABLING SOLUTION

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Olabs comprehensive copper solutions fully SATISFY your network needs



Olabs offers a complete solution to cater for all your copper connectivity needs.

Our end-to-end copper solution comprising of UTP cables, UTP patchcords, patch panels, faceplates and keystone jacks.

This comprehensive copper solution combines performance, quality, reliability and price competitiveness, which offers you the best option to extend your budget while satisfying all mission-critical requirements in network infrastructure.





## UTP CABLES

P.148	Cat-6A UTP Cables
P.150	Cat-6 UTP Cables
P.152	Cat-5E UTP Cables

## UTP PATCHCORDS

P.154	Cat-6A UTP Patchcords
P.155	Cat-6 UTP Patchcords
P.156	Cat-5E UTP Patchcords

## UTP RJ-45 KEYSTONE JACKS

P.157	UTP RJ-45 Keystone Jacks
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## UTP PATCH PANELS

P.158	UTP Patch Panels
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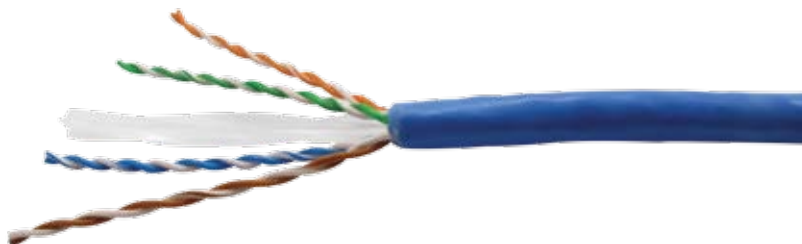
## RJ-45 FACEPLATES

P.160	RJ-45 Faceplates
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# CAT-6A UTP CABLES

Cat-6A UTP cable, constructed with 4-pair with 23 to 26AWG conductor, structuring with internal separator for optimal ANEXT performance for crosstalk protection.

The cable is available in box of 305 meters (1000 feet) per package for your convenient cabling management.



## KEY FEATURES :

- ANSI/TIA-568-C.2, Category 6A standard
- Complies with IEEE 802.3an 10Gb/s Ethernet
- 4-pair UTP cable shielding
- Available in 305 meters (1000 feet) per package

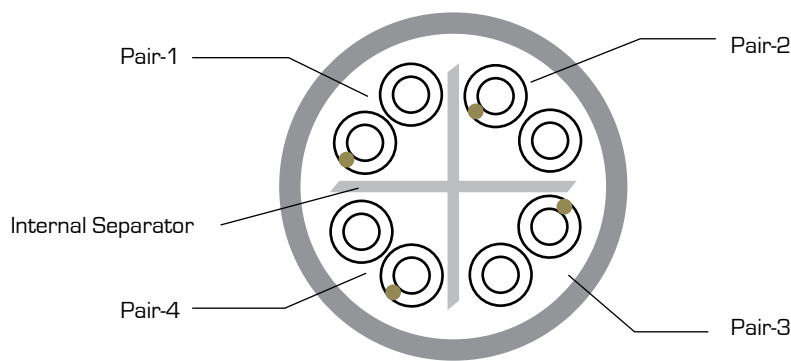
## Specifications

<b>Conductor</b>	23AWG ~ 26AWG
<b>Electrical Specifications</b>	<ol style="list-style-type: none"> <li>1. Conductor Resistance : <math>\leq 6.58\text{ohms}/100\text{m}</math></li> <li>2. Resistance Unbalanced: <math>\leq 2.5\%</math></li> <li>3. Mutual Capacitance: <math>5.6\text{nF}/100\text{m}</math></li> <li>4. Characteristic Impedance: <math>100 \pm 15\text{ohms}</math></li> <li>5. Attenuation to Crosstalk Far End: <math>38.3\text{dB}/100\text{m}</math> (250Mhz)</li> <li>6. Return Loss: <math>17.3\text{dB}</math> (250Mhz)</li> <li>7. Maximum Operating Frequency: 500MHz</li> </ol>
<b>Jacket Material Options</b>	PVC, LSZH
<b>Operating Temperature</b>	- 20°C to + 75°C
<b>Compliance</b>	RoHS, ANSI/TIA-EIA-568-C.2 Category 6A, IEEE 802.3an
<b>Cable Outer Diameter</b>	6.0mm - 0/+ 0.3
<b>Length per Box</b>	305 meters (1000 feet)
<b>Weight per Box</b>	16Kgs

# CAT-6A UTP CABLES

Item Description	Part No. for 2 Types of Cable Jacket	
	PVC Jacket	LSZH Jacket
Cat-6A UTP Twisted Pairs 4-Pair Cable, 305m per Box	UC3A4V-305M	UC3A4L-305M

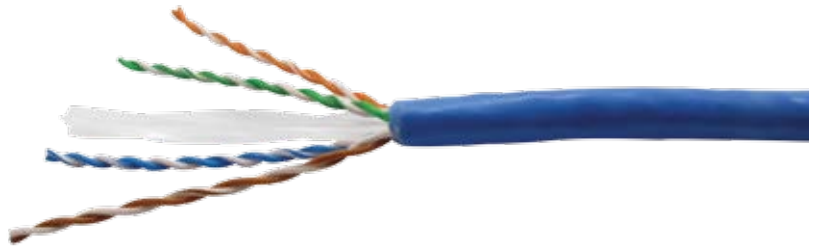
## CABLE CROSS SECTION DIAGRAM



- Pair-1: Blue & White/Blue
- Pair-2: Orange & White/Orange
- Pair-3: Green & White/Green
- Pair-4: Brown & White/Brown

# CAT-6 UTP CABLES

Cat-6 UTP cable, constructed with 4-pair with 23 to 26AWG conductor, available in box of 305 meters (1000 feet) per package for your convenient cabling management.



## KEY FEATURES :

- ANSI/TIA-568-C.2, Category 6 standard
- Complies with ISO/IEC 11801 Class E standard
- 4-pair UTP cable shielding
- Available in 305 meters (1000 feet) per package

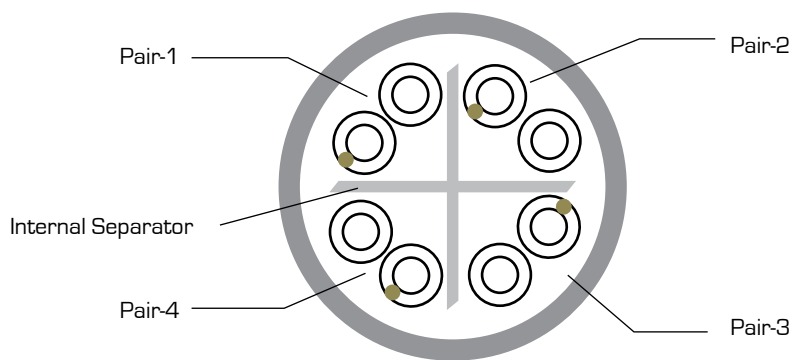
## Specifications

<b>Conductor</b>	23AWG ~ 26AWG
<b>Electrical Specifications</b>	<ol style="list-style-type: none"> <li>1. Conductor Resistance : <math>\leq 6.58\text{ohms}/100\text{m}</math></li> <li>2. Resistance Unbalanced: <math>\leq 2.5\%</math></li> <li>3. Mutual Capacitance: <math>5.6\text{nF}/100\text{m}</math></li> <li>4. Characteristic Impedance: <math>100 \pm 15\text{ohms}</math></li> <li>5. Attenuation to Crosstalk Far End: <math>38.3\text{dB}/100\text{m}</math> (250Mhz)</li> <li>6. Return Loss: <math>17.3\text{dB}</math> (250Mhz)</li> <li>7. Maximum Operating Frequency: 250MHz</li> </ol>
<b>Jacket Material Options</b>	PVC, LSZH
<b>Operating Temperature</b>	- 20°C to + 75°C
<b>Compliance</b>	RoHS, ANSI/TIA-EIA-568-C.2, ISO 11801 Class E
<b>Cable Outer Diameter</b>	6.0mm - 0/+ 0.3
<b>Length per Box</b>	305 meters (1000 feet)
<b>Weight per Box</b>	16Kgs

# CAT-6 UTP CABLES

Item Description	Part No. for 2 Types of Cable Jacket	
	PVC Jacket	LSZH Jacket
Cat-6 UTP Twisted Pairs 4-Pair Cable, 305m per Box	UC2A4V-305M	UC2A4L-305M

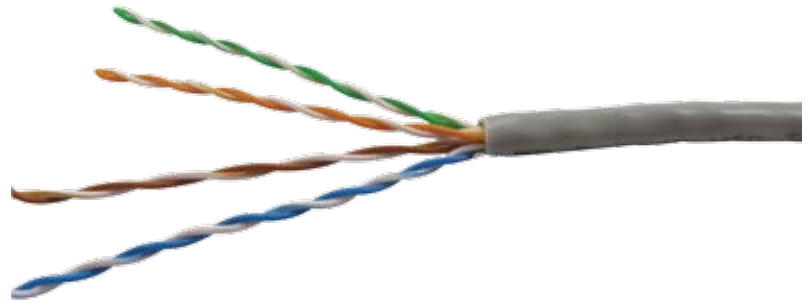
## CABLE CROSS SECTION DIAGRAM



- Pair-1: Blue & White/Blue
- Pair-2: Orange & White/Orange
- Pair-3: Green & White/Green
- Pair-4: Brown & White/Brown

# CAT-5E UTP CABLES

Cat-5E UTP cable, constructed with 4-pair with 24AWG bare copper conductor, available in box of 305 meters (1000 feet) per package for your convenient cabling management.



## KEY FEATURES :

- ANSI/TIA-568-B.2.-1 Category 5E standard
- Complies with ISO 11801 Class E standard
- 4-pair UTP cable shielding
- Available in 305 meters (1000 feet) per package

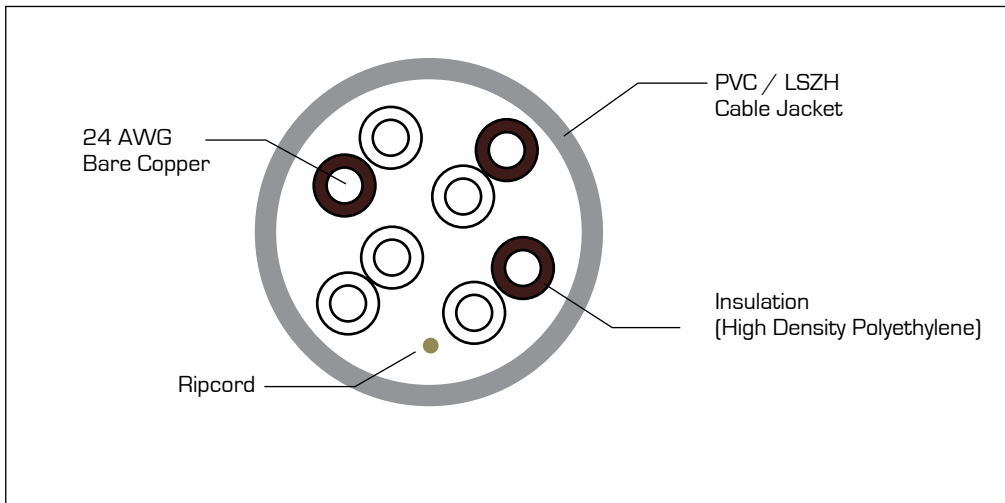
## Specifications

<b>Conductor</b>	24AWG bare copper (0.5 ± 0.01mm)
<b>Electrical Specifications</b>	<ol style="list-style-type: none"> <li>1. Conductor Resistance : ≤ 9.5ohms/100m</li> <li>2. Resistance Unbalanced: ≤ 5% Max</li> <li>3. Mutual Capacitance: 5.6nF/100m</li> <li>4. Characteristic Impedance: 100 ± 15ohms at 1 to 100MHz</li> <li>5. Attenuation to Crosstalk Far End: 21.9dB/100m (100Mhz)</li> <li>6. Return Loss: 25dB (100Mhz)</li> <li>7. Maximum Operating Frequency: 100MHz</li> </ol>
<b>Jacket Material Options</b>	PVC, LSZH
<b>Operating Temperature</b>	- 20°C to + 70°C
<b>Compliance</b>	RoHS, ANSI/TIA-EIA-568-B.2.-1, ISO 11801 Class E
<b>Cable Outer Diameter</b>	5.0mm ± 0.2
<b>Length per Box</b>	305 meters (1000 feet)
<b>Weight per Box</b>	16Kgs

# CAT-5E UTP CABLES

Item Description	Part No. for 2 Types of Cable Jacket	
	PVC Jacket	LSZH Jacket
Cat-5E UTP Twisted Pairs 4-Pair Cable, 305m per Box	UC1A4V-305M	UC1A4L-305M

## CABLE CROSS SECTION DIAGRAM





# CAT-6A UTP PATCHCORDS

Cat-6A UTP patchcords with 100% factory tested for ensuring ANSI/TIA-568-B2.0 for Category 6A requirement.

Available in various length options and colors for convenient installation.



## KEY FEATURES :

- 100% factory tested to guarantee performance
- RJ-45 connectors
- Flame retardant jacket with options of PVC or LSZH
- Various length options (1m, 2m, 3m, 5m)

## Specifications

<b>Connector Type</b>	RJ-45
<b>Conductor</b>	23AWG
<b>Jacket Material Options</b>	PVC, LSZH
<b>Operating Temperature</b>	- 20°C to + 75°C
<b>Length Options in Meter</b>	1m, 2m, 3m, 5m
<b>Compliance</b>	ANSI/TIA-568-B2.0 for Category 6A Requirements RoHS

Item Description	Part No. for 2 Types of Cable Jacket <sup>(1), (2)</sup>	
	PVC Jacket	LSZH Jacket
Cat-6A UTP RJ-45 Patchcord, xxx Length in Meter	UP3V-xxxM	UP3L-xxxM

[1] "xxx" refers to patchcord length in Meter, options available are "001", "002", "003" & "005"

[2] Customized length or non-standard jacket color available upon request, please check with Olabs sales team for details

# CAT-6 UTP PATCHCORDS

Cat-6 UTP patchcords with 100% factory tested for ensuring ANSI/TIA-568 for Category 6 requirement.

Available in various length options and colors for convenient installation.



## KEY FEATURES :

- 100% factory tested to guarantee performance
- RJ-45 connectors
- Flame retardant jacket with options of PVC or LSZH
- Various length options [1m, 2m, 3m, 5m]

## Specifications

<b>Connector Type</b>	RJ-45
<b>Conductor</b>	23AWG
<b>Jacket Material Options</b>	PVC, LSZH
<b>Operating Temperature</b>	- 20°C to + 75°C
<b>Length Options</b>	1m, 2m, 3m, 5m
<b>Compliance</b>	ANSI/TIA-568 for Category 6 Requirements RoHS

Item Description	Part No. for 2 Types of Cable Jacket <sup>(1), (2)</sup>	
	PVC Jacket	LSZH Jacket
Cat-6 UTP RJ-45 Patchcord, xxx Length in Meter	UP2V-xxxM	UP2L-xxxM

[1] "xxx" refers to patchcord length in Meter, options available are "001", "002", "003" & "005"  
 [2] Customized length or non-standard jacket color available upon request, please check with Olabs sales team for details

# CAT 5E UTP PATCHCORDS

Cat-5E UTP patchcords with 100% factory tested for ensuring ANSI/TIA-568 for Category 5E requirement.

Available in various length options and colors for convenient installation.



## KEY FEATURES :

- 100% factory tested to guarantee performance
- RJ-45 connectors
- Flame retardant jacket with options of PVC or LSZH
- Various length options (1m, 2m, 3m, 5m)

## Specifications

<b>Connector Type</b>	RJ-45
<b>Conductor</b>	24AWG
<b>Jacket Material Options</b>	PVC, LSZH
<b>Operating Temperature</b>	- 20°C to + 70°C
<b>Length Options</b>	1m, 2m, 3m, 5m
<b>Compliance</b>	ANSI/TIA-568A for Category 5E Requirements RoHS

Item Description	Part No. for 2 Types of Cable Jacket <sup>(1), (2)</sup>	
	PVC Jacket	LSZH Jacket
Cat-5 UTP RJ-45 Patchcord, xxx Length in Meter	UP1V-xxxM	UP1L-xxxM

[1] "xxx" refers to patchcord length in Meter, options available are "001", "002", "003" & "005"

[2] Customized length or non-standard jacket color available upon request, please check with Olabs sales team for details

# UTP RJ-45 KEYSTONE JACKS

UTP RJ-45 keystone jack in modular style with 8-position 8-conductor (8P8C) design.

Offered in Cat-5E, Cat-6 or Cat-6A to cater for high speed applications.

Backward compatible with Cat-3 and Cat-5 patchcords and suitable for using with any RJ-45 faceplates or surface boxes.



## KEY FEATURES :

- Complies and exceeds all Category 5E, Category 6 or Category 6A performance requirements
- UTP RJ-45 keystone jack in modular design
- Tool-less design for ease of use and convenient installation
- 8-position 8-conductor (8P8C) design
- Suitable for use with any RJ-45 faceplates or surface boxes
- Backward compatible with Cat-3 and Cat-5 patchcords

## Specifications

<b>Jack Module</b>	RJ-45
<b>Style</b>	Modular style
<b>Performance Category</b>	UTP Cat-5E, Cat-6 or Cat-6A
<b>Modular Connector Type</b>	8-position 8-conductor (8P8C)
<b>Operating Temperature</b>	- 20°C to + 75°C
<b>Mating Durability</b>	Cat-5E : 750 mating Cat-6 or Cat-6A : 500 mating
<b>Compliance</b>	Complies and Exceeds all Category 5E, Category 6 or Category 6A Requirements RoHS

Item Description	Part No.
RJ-45 Keystone Jack, Cat-5E	KJA-001
RJ-45 Keystone Jack, Cat-6	KJB-001
RJ-45 Keystone Jack, Cat-6A	KJC-001

# UTP PATCH PANELS

UTP Patch Panels for Cat-5E, Cat-6 or Cat-6A for directly use with RJ-45 jack modules for copper cable management.

Available in standard flat and angled versions with options of 1U 24-port and 2U 48-port.



## KEY FEATURES :

- Complies and exceeds all Category 5E, Category 6 or Category 6A performance requirements
- User friendly solution for accommodating RJ-45 jack modules
- Individual termination of each module with reliable performance
- Suitable for use with any EIA 19" rack-mountable units
- Options of flat and angled style
- Available in 1U with 24-ports and 2U with 48-ports
- Accept 22 to 26AWG solid wire

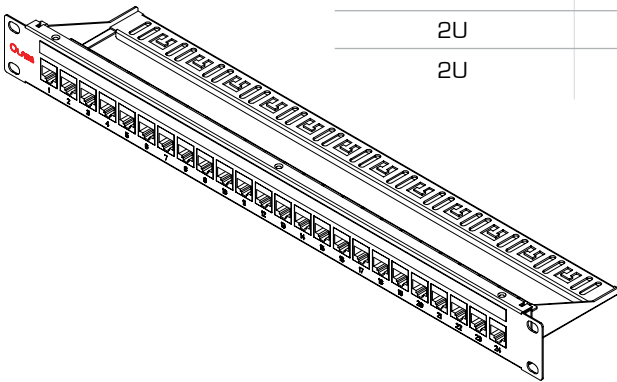
## Specifications

<b>Suitable Cable Type</b>	Cat-5E, Cat-6 or Cat-6A	
<b>Panel Materials</b>	Steel	
<b>Overall Dimensions (H x W x D)</b>	Flat Panel	1U: 44mm x 482mm x 270 mm
		2U: 88mm x 482mm x 270 mm
	Angled Panel	1U: 44mm x 482mm x 150 mm
		2U: 88mm x 482mm x 150 mm
<b>Port Density Options</b>	1U : 24-port 2U : 48-port	
<b>Panel Net Weight</b>	Flat Panel	1U: 1.0Kgs
		2U: 1.8Kgs
	Angled Panel	1U: 0.9Kgs
		2U: 0.7Kgs
<b>Keystone Jack Module</b>	RJ-45	
<b>Acceptable Conductor</b>	22 to 26AWG	
<b>Terminations</b>	110 Punch Down Style	
<b>Durability</b>	1500 mating	
<b>Operation Temperature</b>	- 40°C to + 60°C	
<b>Compliance</b>	For Cat-5E patch panels: complies ANSI/TIA-568A for Category 5E Requirements For Cat-6 patch panels : complies ANSI/TIA-568 for Category 6 Requirements For Cat-6A patch panels : complies ANSI/TIA-568-B2.0 for Category 6A Requirements ANSI/TIA-1096-A RoHS IEEE 802.3an ISO/IEC 11801 Ed.2.2	

# UTP PATCH PANELS

## UTP FLAT PANEL

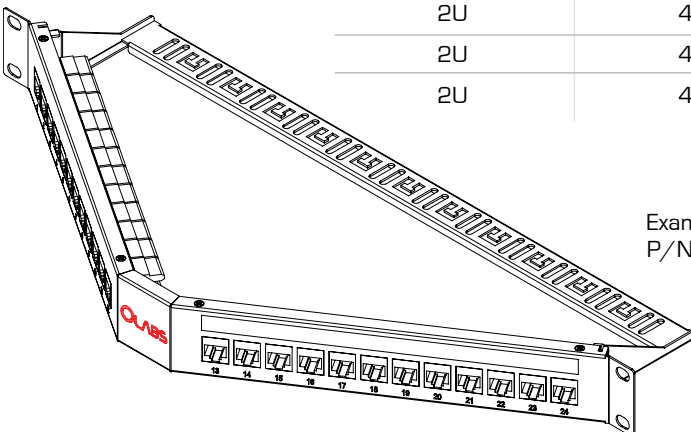
Item Description			Part No.
Rack Unit	No. of Ports	Module Type	
1U	24	Cat-5E	CP1F24A
1U	24	Cat-6	CP1F24B
1U	24	Cat-6A	CP1F24C
2U	48	Cat-5E	CP2F48A
2U	48	Cat-6	CP2F48B
2U	48	Cat-6A	CP2F48C



Example of 1U 24-port UTP Flat Panel, Cat-5E  
P/N: CP1F24A

## UTP ANGLED PANEL

Item Description			Part No.
Rack Unit	No. of Ports	Module Type	
1U	24	Cat-5E	CP1A24A
1U	24	Cat-6	CP1A24B
1U	24	Cat-6A	CP1A24C
2U	48	Cat-5E	CP2A48A
2U	48	Cat-6	CP2A48B
2U	48	Cat-6A	CP2A48C



Example of 1U 24-port UTP Angled Panel, Cat-6  
P/N: CP1A24B

# RJ-45 FACEPLATES

UTP RJ-45 Faceplate offers simple snap-in installation solution to bring connectivity to the desk.

Available with single or dual sockets with options of preloaded Cat-5E, 6, or 6A keystone jacks, for uses at work areas include offices, schools and factories.



## KEY FEATURES :

- 45-degree angled socket with options of Single and Dual
- Options of stand alone faceplate or preloaded with keystone jack
- 86-Type design with size of 86 x 86mm
- Plastic white with aesthetical design
- Supplied with two mounting screws for installation

## Specifications

<b>Faceplate Style</b>	86-Type
<b>Faceplate Size (L x W)</b>	86mm x 86mm
<b>Jack Module</b>	RJ-45
<b>Faceplate Color</b>	White
<b>Materials</b>	ABS+PC Plastic
<b>Socket Options</b>	Single Socket Dual Socket
<b>Accommodates Keystone Jack</b>	UTP Cat-5E, Cat-6 or Cat-6A
<b>Accessories</b>	Mounting Screws (x2)

## FACEPLATE LOADED WITH KEYSTONE JACKS



Item Description	Part No.		
	Cat-5E	Cat-6	Cat-6A
RJ-45 Faceplate, 45-degree Single Socket, White Color	FP1SAWA	FP1SAWB	FP1SAWC



Item Description	Part No.		
	Cat-5E	Cat-6	Cat-6A
RJ-45 Faceplate, 45-degree Dual Socket, White Color	FP1DAWA	FP1DAWB	FP1DAWC



Information, specifications and product offerings in this catalogue are subject to change without notice.  
Product photos and drawings are provided for the convenience of our customers and for reference only.



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