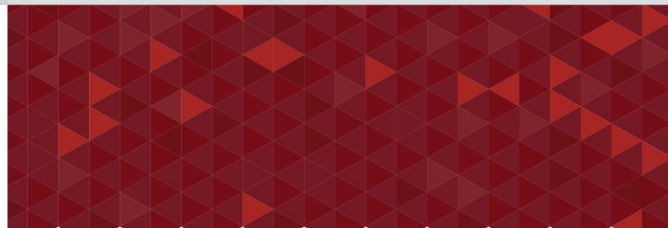




WWW.KETROWA.COM

ABOUT KETROWA

Providing materials and equipment for construction projects is always one of the most important concerns of builders and project managers. The importance of this issue stems from its direct impact on the project schedule, construction cost, and final building value. With the aim of facilitating the process of providing construction goods and taking into account its social responsibility, Ketrowa team has created a comprehensive and online system. In this system, builders will be able to prepare the schedule for the supply of materials and equipment for their construction projects and order the supply of goods based on the plan. These orders are made by comparing various products available in the system. Mass builders are the most important target customers of Ketrowa, and Ketrowa tries to supply and deliver goods on time to the consumer by logical planning for manufacturers and by providing cash and credit purchase model. Also, due to the reception and request for the supply of construction products for foreign markets, the supply of construction products for export markets is another main goal of Ketrowa. Ketrowa plans to transform the traditional and opaque market into a modern, high-speed and accurate market where buyers can get the quality goods they want at the most appropriate price .



MECHANICAL, HEATING
& COOLING FACILITIES

ELECTRICAL
FACILITIES

SANITARY

STRUCTURE

JOINERY &
FINISHING

Products are produced and
supplied in five branches:
Structure, Electrical
Facilities, Mechanical, Heating &
Cooling Facilities, Sanitary, Joinery &
Finishing., combining art and industry.

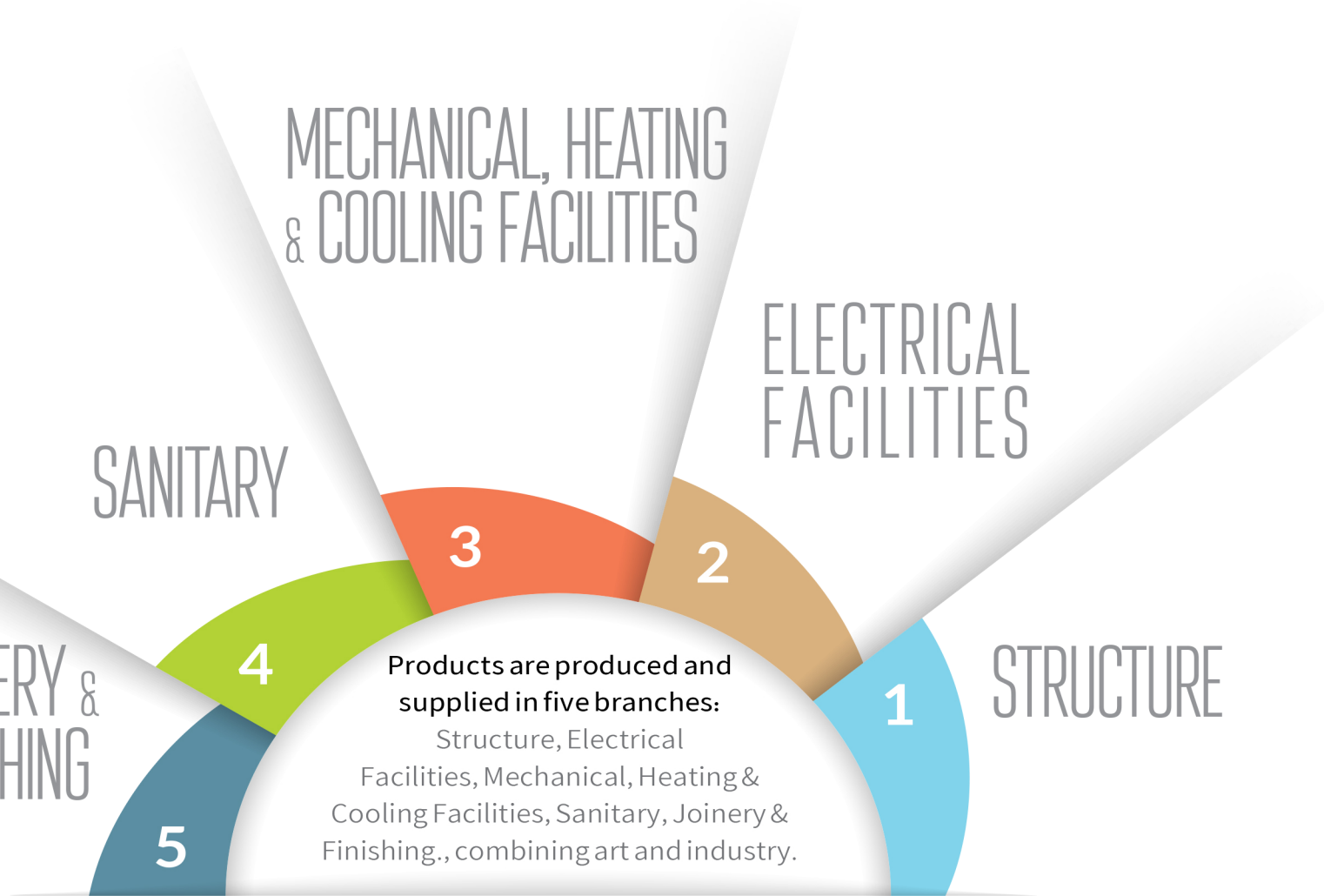
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1

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Fiber Optic Network Equipment



Unitube Fibre Optic Cables

■ Compact Universal cables used for direct burial:

- Accurate fibre excess length
- Specially designed compact structure and PE sheath
- Crush resistant and flexible
- PSP enhances the cable's crush-resistance, impact-resistance and moisture proofing
- Two parallel steel wires ensure tensile strength
- Small diameter, lightweight and hassle-free installation
- Long delivery length

■ OM2 50/125 compliant with ITU G.651, IEC 60793-2-10 Type A1a.1 and ISO/IEC 11801:2002 Amd.2 OM2

■ OS1 9/125 compliant with ITU G.652.D, IEC 60793-2-50 Type B1.3, ISO/IEC 11801:2011 Ed2.2

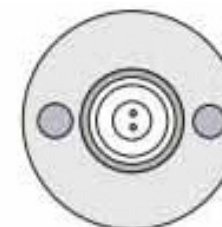
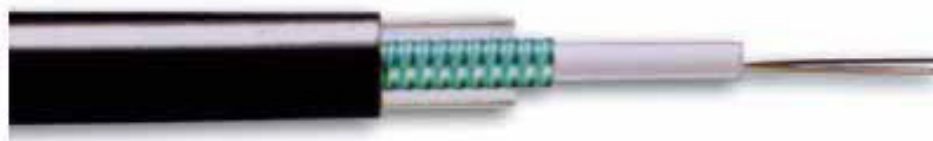
■ Cable mechanical characteristics tested according to IEC 60794-1

OS1 9/125

Length	Type
2000m	4 fibre, OS1 9/125, Unitube Light Armoured
2000m	6 fibre, OS1 9/125, Unitube Light Armoured
2000m	8 fibre, OS1 9/125, Unitube Light Armoured
2000m	12 fibre, OS1 9/125, Unitube Light Armoured
2000m	24 fibre, OS1 9/125, Unitube Light Armoured

OM2 50/125

Length	Type
2000m	4 fibre, OM2 50/125, Stranded Loose Tube Armoured
2000m	6 fibre, OM2 50/125, Stranded Loose Tube Armoured
2000m	12 fibre, OM2 50/125, Stranded Loose Tube Armoured
2000m	24 fibre, OM2 50/125, Stranded Loose Tube Armoured



FL-C Loose Tube Fibre Optic Cables

■ Compact and universal cables suitable for indoor and specific outdoor installations:

- Low Smoke Zero Halogen (LSZH) green coloured external sheath
- UV resistant
- dielectric
- high tensile strength
- rodent retardant
- longitudinally watertight

■ Maximum pulling force: 1500 Newton (1800 Newton for 24FO)

■ Rodent protection:

■ Minimum bending radius: OD x 10 (ex: 51mm for 5,1mm OD)

■ Ambient air temperature (minimum & maximum):

- for installation: -5° ... +50°C
- for operation: -20°... +70°
- for storage: -40° ... +70°

■ Tight buffered gel-free cable construction with 900 µm coating.

■ Flame retardant according to IEC 60 332-1, EN 50 265 2.1, NFC 32 070 2.1 (Category C2). Fire retardant according to IEC 60 332-3 C, EN 50 266, NFC 32 070 2.2 (Category C1) Performances

■ OM2 50/125 compliant with ITU G.651, IEC 60793-2-10 Type A1a.1 and ISO/IEC 11801:2011 Ed2.2 OM2.

■ OM3 50/125 compliant with ITU G.651, IEC 60793-2-10 Type A1a.2 and ISO/IEC 11801:2011 Ed2.2 OM3.

■ OM4 50/125 compliant with IEC 60793-2-10 Type A1a.3, ISO/IEC 11801:2011 Ed2.2 OM4.

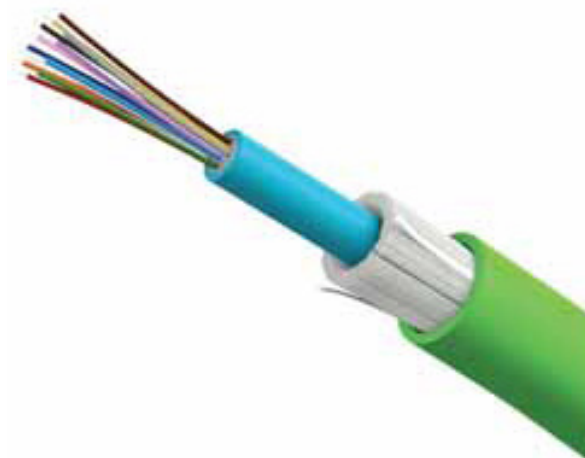
■ OS1/OS2 9/125 compliant with ITU G.652.D, IEC 60793-2-50 Type B1.3, ISO/IEC 11801:2011 Ed2.2 OS2.

■ Cable mechanical characteristics tested according to IEC 60794-1 Use

■ High data rate fibre optic backbones for building and campus

■ Horizontal cable (FTTD Fibre to the desk) with the 2 fibres

■ Suitable for direct termination: installation with connectors (prefbred, cold-cured and/or heat-cured types).



OM2 50/125 µm

Diameter	Length	Type
6.2mm	2100m	8 fibres, OM2 50/125, Loose tube, Up to 10Gbps ethernet supported

OS1/OS2 9/125 µm

Diameter	Length	Type
6.2mm	525m	12 fibres, OS1/OS2 9/125, Loose tube, Up to 100Gbps ethernet supported
6.2mm	2100m	

OM3 50/125 µm

Diameter	Length	Type
6.2mm	525m	OM3 50/125, Loose tube, 12 fibres Up to 40Gbps ethernet supported
6.2mm	2100m	



FL-C Tight Buffered Fibre Optic Cables

- **Compact and universal cables suitable for indoor and specific outdoor installations:**

- Low Smoke Zero Halogen (LSZH) green coloured external sheath
- UV resistant
- dielectric
- high tensile strength
- rodent retardant
- longitudinally watertight

- **Maximum pulling force: 1500 Newton (1800 Newton for 24FO)**

- **Rodent protection:**

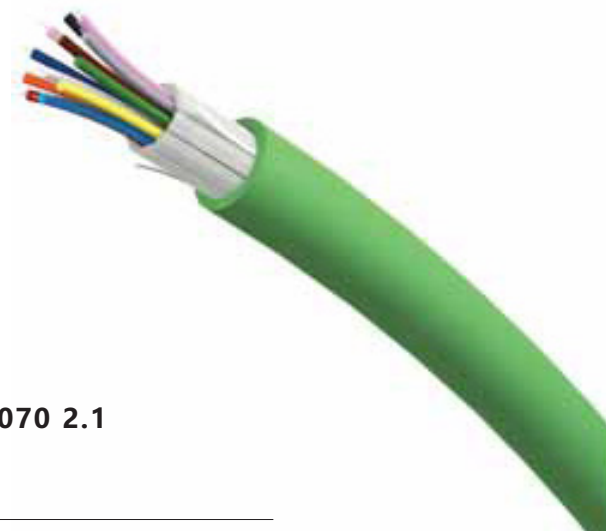
- **Minimum bending radius: OD x 10 (ex: 51mm for 5,1mm OD)**

- **Ambiant air temperature (minimum & maximum):**

- for installation: -5° ... +50°C
- for operation: -20° ... +70°
- for storage: -40° ... +70°

- **Tight buffered gel-free cable construction with 900 µm coating.**

- **Flame retardant according to IEC 60 332-1, EN 50 265 2.1, NFC 32 070 2.1 (Category C2). Fire retardant according to IEC 60 332-3 C, EN 50 266, NFC 32 070 2.2 (Category C1)**



Performances

- **OM2 50/125 compliant with ITU G.651, IEC 60793-2-10 Type A1a.1 and ISO/IEC 11801:2011 Ed2.2 OM2.**

- **OM3 50/125 compliant with ITU G.651, IEC 60793-2-10 Type A1a.2 and ISO/IEC 11801:2011 Ed2.2 OM3.**

- **OM4 50/125 compliant with IEC 60793-2-10 Type A1a.3, ISO/IEC 11801:2011 Ed2.2 OM4.**

- **OS1/OS2 9/125 compliant with ITU G.652.D, IEC 60793-2-50 Type B1.3, ISO/IEC 11801:2011 Ed2.2 OS2.**

- **Cable mechanical characteristics tested according to IEC 60794-1**

Use

- **High data rate fibre optic backbones for building and campus**

- **Horizontal cable (FTTD Fibre to the desk) with the 2 fibres**

- **Suitable for direct termination: installation with connectors (prefbred, cold-cured and/or heat-cured types).**

OM2 50/125 μ m

Diameter	Length	Type
6.7mm	525m	12 fibres, OM2 50/125, Tight buffered,
	2100m	Up to 10Gbps ethernet supported

**OM3 50/125 μ m**

Diameter	Length	Type
6.7mm	525m	12 fibres, OM3 50/125, Tight buffered,
	2100m	Up to 40Gbps ethernet supported

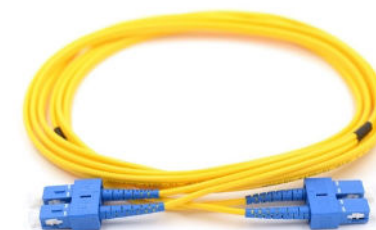
**OS1/OS2 9/125 μ m**

Diameter	Length	Type
6.7mm	525m	12 fibres, OS1/OS2 9/125, Tight buffered,
	2100m	Up to 100Gbps ethernet supported on long distance



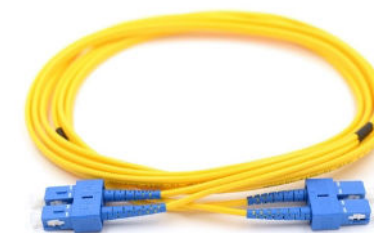
Fibre Optic Patch Cord OM2 50/125

Length	Type
1m 2m 3m 5m 10m	Optic Patch Cord SC/SC
1m 2m 3m 5m 10m	Optic Patch Cord LC/LC
1m 2m 3m 5m 10m	Optic Patch Cord LC/SC



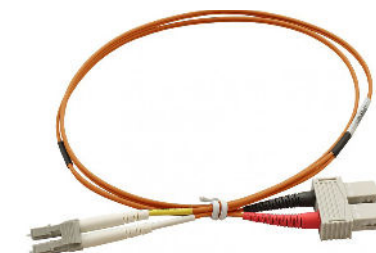
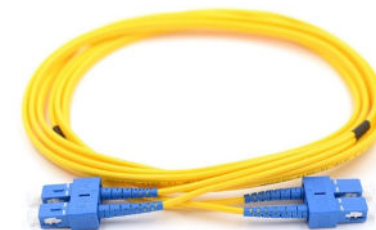
Fibre Optic Patch Cord OM3 50/125

Length	Type
1m	Optic Patch Cord SC/SC
2m	
3m	
5m	
10m	
1m	Optic Patch Cord LC/LC
2m	
3m	
5m	
10m	
1m	Optic Patch Cord LC/SC
2m	
3m	
5m	
10m	



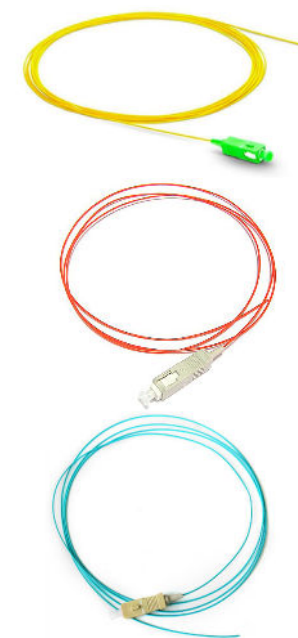
Fibre Optic Patch Cord OS1 9/125

Length	Type
1m	Optic Patch Cord SC/SC
2m	
3m	
5m	
10m	
1m	Optic Patch Cord LC/LC
2m	
3m	
5m	
10m	
1m	Optic Patch Cord LC/SC
2m	
3m	
5m	
10m	



Pigtail Multimode and Singlemode (OM2 - OM3 - OS1)

	Length	Type
Pigtail Multimode and Singlemode OS1	2m	Pigtail OS1 9/125 LC
		Pigtail OS1 9/125 SC
Pigtail Multimode and Singlemode OM2	2m	Pigtail OM2 50/125 LC
		Pigtail OM2 50/125 SC
Pigtail Multimode and Singlemode OM3	0.7m	Pigtail OM3 50/125 LC
		Pigtail OM3 50/125 SC



Coverplates Without Adapters

Coverplate for 3 SC duplex adapters

Coverplate for 6 LC duplex adapters compatible with LC duplex adapter / rect.

Blank Plate

Blank Plate for Fiber Optic Panel



Evolution Universal Sliding Fibre Optic Panel 1U

Technical Specifications: Universal sliding 19" fibre optic panel with 4 positions, equipped with 3 blank plates. The 1st position is empty and is to be fitted with suitable coverplate. | 1 Quick Fix function on both sides to allow a simple, quick fixing position and sliding feature | Removable transparent cover mounted | Fibre patchcord guiding structure at the front, protected by cover equipped with label holders. Evolution panel for direct terminations | Equipped with 2 coiling wheels and 2 PG9 (Ø 7 mm max.) cable glands | Evolution Fibre optic panel 1U with 3 blank plates, for splices



Pigtail Multimode and Singlemode (Duplex Adapter)

Type	SC Duplex Adapter MM	LC Duplex Adapter rect MM
Type	SC Duplex Adapter SM	LC Duplex Adapter rect SM



Splitter Box/PLC 16*1 Fiber optic splitter

Specifications

Splitter Length: 1.5 meters

Number of Final Splitters: 1:16

Cable Diameter: 900 microns

Type of Splitter Cover: Steel

Splitter Technology: PLC

Wavelength: 1260-1620nm

Level of Uniformity: 1.5

Amount of Return: 50

NFC 32 070 2.2 (Category C1)

Optical fiber splitters or 1:16 optical fiber splitters are used in FTTH networks, that is, exactly where the Internet is delivered to customers using optical fiber. It is routed from the server room to the client device without changing the transmission environment. The PLC splitter is available with 1:16 symmetrical power distribution with both input and output interfaces. The compact steel box housing allows for easy installation in fiber optic switches and connectors. The 1:16 fiber optic splitter is built on a slim 0.9mm cable, making it easy to install in a variety of organizers. Splitters play an important role in telecommunication systems by sharing signals sent in PON and GPON systems for subscribers. Splitters are structurally divided into two types: 1*N and 2*N. 1*N splitter is used in star topology and 2*N splitter is used in ring topology. Based on the manufacturing technology, the splitters are divided into two types: PLC SPLITTER and FBT SPLITTER. PLC splitters are produced in the following forms for better and easier performance:

Splitter box

Pen splitter

19-inch rack mount splitters

Wood splitters



Splitter Box/PLC Mini Type- Optical Fiber Splitter 1x8 pen

Specifications

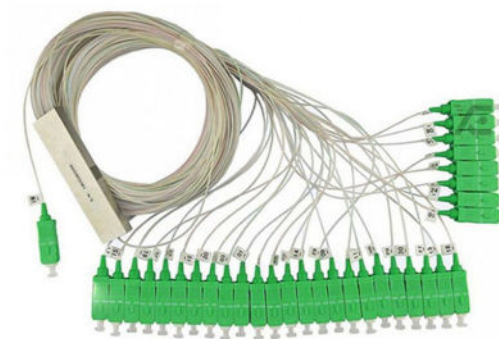
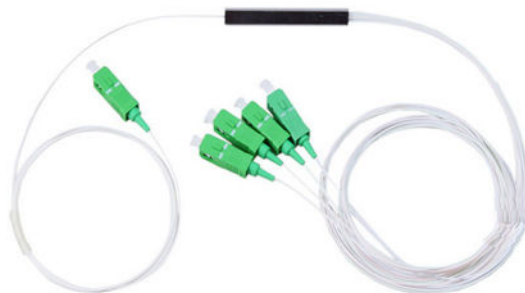
- Low drop rate
- High efficiency
- Uniform distribution of power
- Compact design
- Wide operating wavelength
- Wide operating temperature
- Excellent mechanical stability
- Qualified under Telcordia and GR-1209

SC/APC 1:8 fiber optic splitter has one uplink optical interface and several downlink optical interfaces. Optical signals transmitted from the uplink optical interface to all downlink optical links. Only when the optical signals are transmitted from the uplink optical interface to the downlink optical interface, the optical signal power is reduced / when the optical signals are switched from the downlink optical interface to the uplink optical interface, the optical power is reduced, this is true. By using this splitter, we can copy an optical data for monitoring after optical fiber transmission. Telecom fiber optic splitter What is a fiber optic splitter? Splitters play an important role in telecommunication systems by sharing signals sent in PON and GPON systems for subscribers. Splitters are structurally divided into two types: 1*N and 2*N. 1*N splitter is used in star topology and 2*N splitter is used in ring topology. Based on the manufacturing technology, the splitters are divided into two types: PLC SPLITTER and FBT SPLITTER. PLC splitters are produced in the following forms for better and easier performance:

- Splitter box
- Pen splitter
- 19-inch rack mount splitters
- Wood splitters



Mini Type SC-APC Fiber Optic Splitter	Mini Type SC-APC pen					
	Cable Type	Number of Entries	Coating Colour	Connector Colour	Number of Outputs	Connector Type
Mini Type SC-APC 1*2	Mini Type	1	White	Green	2	APC/SC
Mini Type SC-APC 1*4					4	
Mini Type SC-APC 1*8					8	
Mini Type SC-APC 1*32					32	



Splitter APC Fiber Optic Splitter

Splitter UPC Fiber Optic Splitter

FAT 48 Core FTTH Fiber Optic Distribution Wall Box

2-Core Fiber Optic ATB Box or FTTH Fiber Optic Network Wall Terminal

Specifications

Colour: White

Body Material: Plastic

Number of Ports: 2 SC Simplex

Type of Use: Surface

ATB-2 FTTH network wall terminal box ATB connects the fiber optic cable that runs outside your home to your modem. The ATB is a small white plastic box (180mm x 50mm x 120mm) that fits on your interi-or wall. It is very important to know where to install the ATB before starting the fiber optic installation project. Because this can affect your bandwidth experience. Your modem connects to your ATB so it must be installed in a very convenient place. Where you have the most internet. ATB or OTO is a box that is installed at the user's location and terminates the Passive Optical Network (PON).



Multimode Fiber Optic Patch Cord LC-LC OM4 (3m)

Specifications

Connector Type: LC/LC

Fiber Type: Multimode (OM4)

Cable Length: 3 metres



12-color single mode fiber optic pigtail SC/UPC/LSZH (1.5m)

Specifications

Standard: G65782

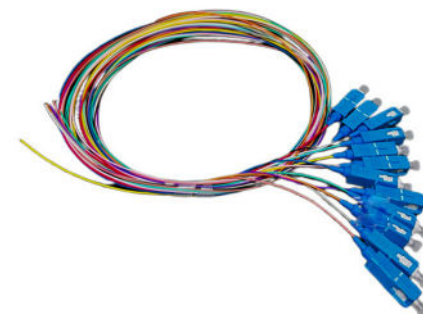
Connector Type: SC

Fiber Type: single mode

Cable Length: 1.5 metres

Color of Cable Cover: 12 colors

Coating Material: LSZH



Fiber Optic Splitter Box

FTTH ODF 8 Core

Specifications

Body Colour: White

Weight (gr): 0.4 grams

Dimensions (mm): 220 x 215 x 50 mm

Body Material: ABS Plastic

Product Type: FIBER ACCESS TERMINAL BOX

Usage: Can be used in OUTDOOR Environments

Optical Fiber Splitter: None

Fiber Optic Adapter: None

Installable Adapter Type: SC

Number of Adapters that Can be Installed: 8





IN KETROWA BUSINESS MODEL, MASS BUILDERS ARE THE MOST IMPORTANT TARGET CUSTOMERS.