

PRODUCT CATALOGUE



FIBER OPTICAL  
NETWORK SOLUTION

# FIBER OPTICAL CABLE

[www.defangtech.com](http://www.defangtech.com)

# COMPANY INTRODUCTION

Defang Technology is a leading manufacturer and distributor of cable products, OEM power supplies, Fiber Optic Cables and Terminals.

We are specialized in designing, manufacturing and marketing various Cables (HDMI cable, CAT 5/6 cable, Audio & Video cables, computer cables, Fiber Optic cables), premise equipment power supplies/cables, FTTx Series and telecommunication products.

Majority Of Our products are sold in north America, south America and EMEA. Defang has earned high reputation from our customers for its excellent product quality, outstanding customer service (e.g., product customization, kitting and worry-free shipping and custom clearance) and lowest total cost Of ownership.

Defang's main office is in Shanghai, China and we have several manufacturing facilities in China and Mexico, all of which are compliant to ISO9001 :2000 standards.

Defang is a member Of HDMI Association and has HDMI ATC I .4 certification. All of our products are 100% RoHS compliant.

Defang takes pride in our quality control system and customer service-oriented culture. Our goal is to provide our customers high quality products with IOW cost Of ownership and with superior customer service. We want to be a responsible, flexible and value adding partner of your business.



# DF Catalog Index 2022

## DF Fiber Optical Network Solution

### I. Optical Cable

a. Indoor optical Cable	03
b. Indoor bundle/branch optical Cable	04
c. Remote Optical Cable	05
d. Bow-type drop optical Cable	06
e. Circular Drop Optical Cable	07

### II. Optical Fiber Accessories

1. Optical Fiber Pigtail	10
2. Optical Fiber Patch Cord	11
3. Fast Connector	12
4. PLC Optical Splitter	15

# Optical Cable

## Indoor optical cable

### Description

Use the  $\varphi 0.9\text{mm}$  anti-flaming tight tube optical fiber as the light transmission media, cover a layer of aramid fiber as the stress reinforced unit, and extrude a layer of sheath in the outermost layer.

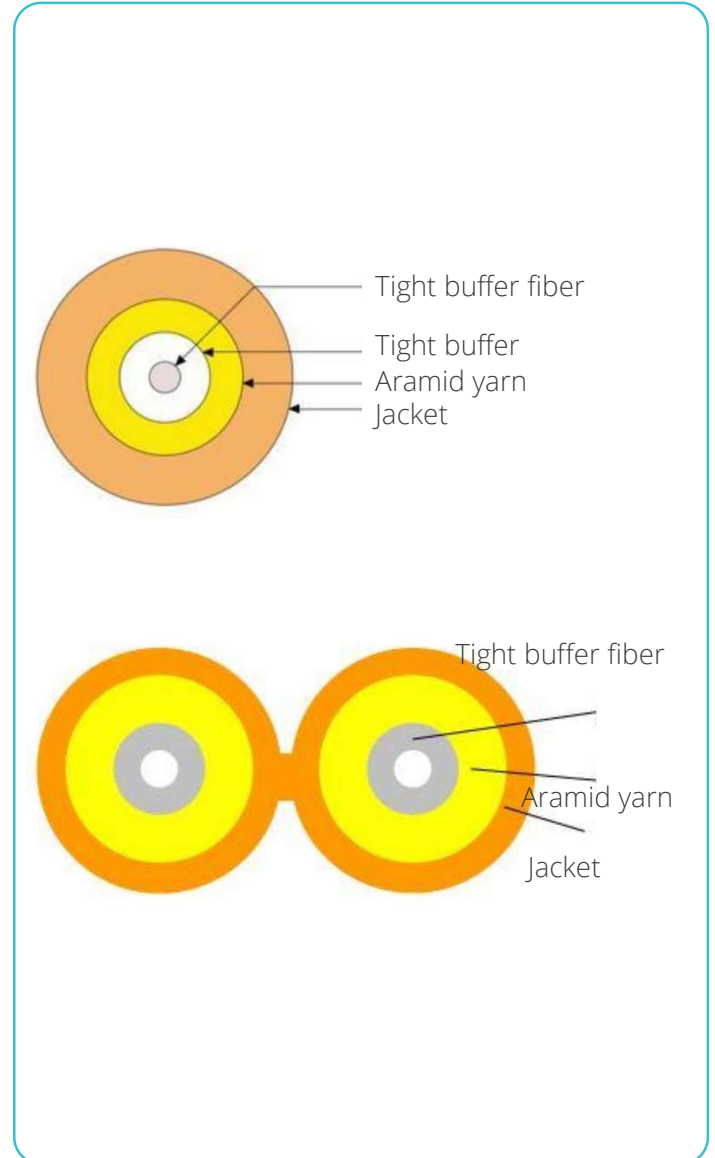
### Characteristic

- The adopted tight tube optical fiber is convenient for the stripping
- The aramid fiber reinforced structure has an excellent tensile property
- Good anti-flaming performance
- The outer sheath is anticorrosion, waterproof, anti-UV and so on

### Application

- Optical fiber activity to connect with the patch cord and the pigtail
- Indoor wiring and Optical communication equipment room
- Optical distributing racks and optical instruments

### Product image



#### Part Number

DFOPA22CYE-01

#### Description

Optical Cable G657A2 1F OD:2.0mm YELLOW LSZH JACKET 3KM/REEL

# Optical Cable

## Indoor bundle/branch optical cable

### Description

Use the single-core optical cable ( $\Phi 0.9\text{mm}$  tight tube optical fiber,  $\Phi 2.0\text{mm}$  sub-cable, aramid fiber reinforcer) as the sub-element, non-metallic center reinforced core, the optical cable sub-element is stranded in the center reinforced core to form up the cable core, extrude a layer of PVC or LSZH materials (LSZH, low smoke, zero halogen, anti-flaming) sheath.

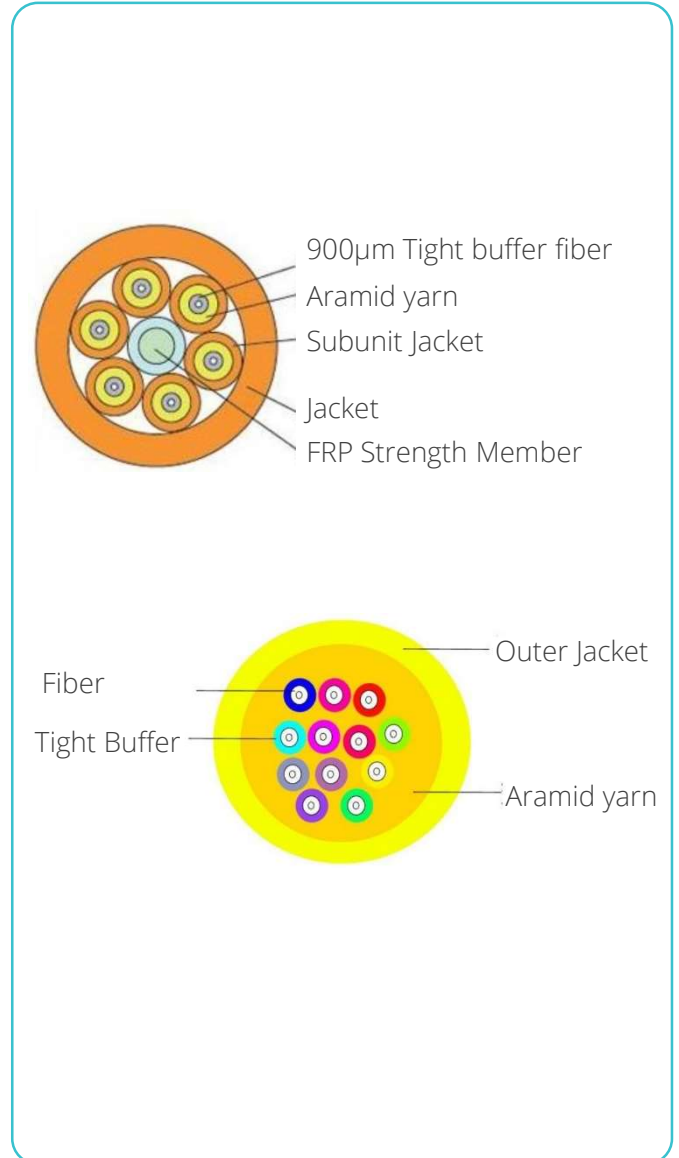
### Characteristic

- The layer-stranding cable structure and the non-metallic center reinforced core has equipped the optical cable with a bigger tensile force.
- The outer sheath is anti-corrosion, waterproof, anti-UV, anti-flaming, and environmental
- The aramid fiber reinforcer has equipped the optical cable with excellent tensile property.

### Application

- It can be applied to the indoor comprehensive wiring or the main cable of the building

### Product image



Part Number	Description
DFOPA216CBK-01	Optical Cable G657A2 16F OD: 12.5mm BLACK LSZH JACKET 1KM/REE

# Optical Cable

## Remote Optical Cable

### Description

Inside the base station transmission system, the optical cable that can offer the signal transmission from the base-band unit to the infinite remote radio unit RRU is called as Wireless Remote Radio Unit Optical Cable

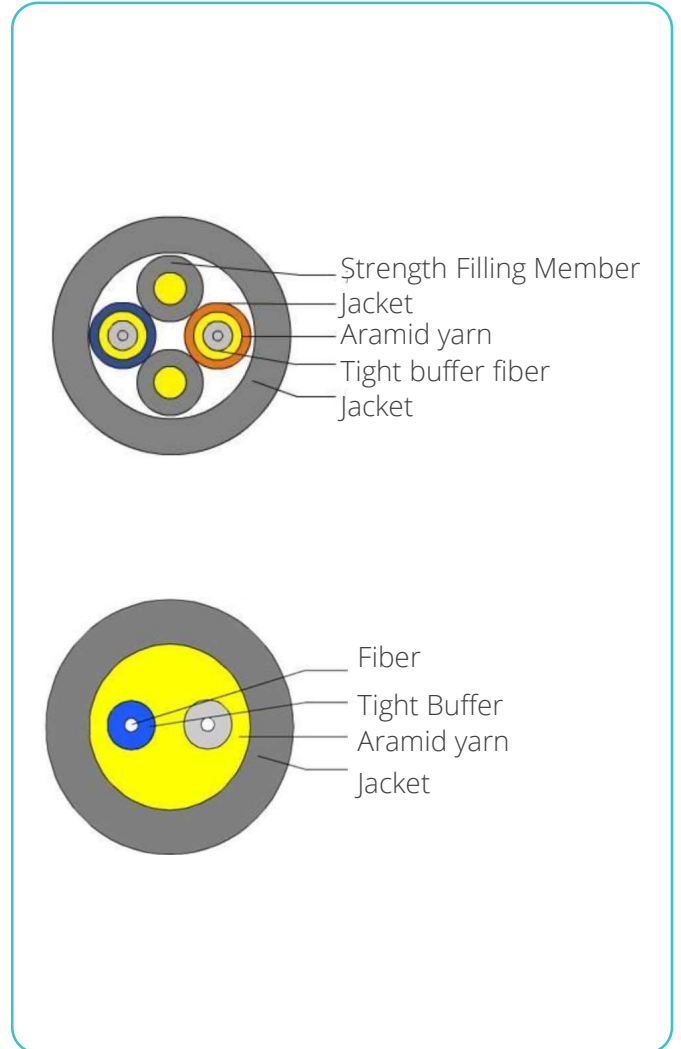
### Characteristic

- The vertical and horizontal wiring of the wireless base station with better mechanical and environmental performance anti-flaming (or non-fire-propagation) performance can meet the requirements of the relevant standards
- The mechanical and physical performances of the sheaths can meet relevant standards
- Soft, flexible and convenient in connection, can support a large volume of data transmission

### Application

- It's used in the data transmission from the mobile base station to the remote radio unit and the connection between the optical fiber and the tower

### Product image



### Performance

Fiber Count	Cable Size(mm)	Cable Weight (kg/km)	Tensile Strength (N)		Crush Resistance (N/100mm)		Bending Radius (mm)		Temperature (°C)
			Long Term	Short Term	Long Term	Short Term	Dynamic	Static	
2 or 4	7.0	42.3	200	400	500	1000	20D	10D	-40~+180

Part Number	Description
DFOPA24CBK-01	Remote Optical Cable G657A2 4F OD: 7.0mm BLACK LSZH JACKET 2KM/REEL

Note: The values in the above table are for reference; The size and weight of optical cable in the table are obtained when single core optical cable adopts  $\phi 2.0$  outer diameter; D stands for the outer diameter of circular optical cable; When adopting G.657 optical fiber, the static bending radius is 5D.

# Optical Cable

## Bow-type drop optical cable

### Description

Put the light in the center, put two parallel metal or non-metallic reinforced (FRP) on both sides, at last extrude the splayed sheath cable.

### Characteristic

- Self-supporting and Non-self-supporting all-dry-type structure, convenient and fast in construction adopt the parallel reinforced structure, provide sufficient mechanical protection
- The excellent stripping capacity doesn't need any professional tools
- Directly connect the outdoor optical cable and the residential building, and the equipment

### Application

- It is applied to data transmission from mobile base station to radio frequency remote unit

### Product image



### Performance

Fiber Count	Cable Size(mm)	Cable Weight (kg/km)	Tensile Strength (N)		Crush Resistance (N/100mm)		Bending Radius (mm)		Temperature (°C)
			Long Term	Short Term	Long Term	Short Term	Dynamic	Static	
2	2.0×3.1	9.5	100	200	500	1000	60	30	-20~+70

Part Number	Description
DFFIG8-2CM	Drop fiber fig 8 black LSZH Jacket G657A1 0.4mm Phosphatized Steel Wire & 1.0 mm Phosphatized Steel Wire OD:2.0*5.0MM

# Optical Cable

## Circular Drop Optical Cable

### Description

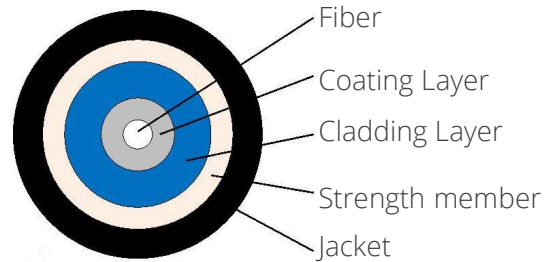
With the tight-tube optical fiber as the basic optical unit, symmetrically distribute the reinforcers in the surrounding, and finally extrude the sheath into the cable.

### Characteristic

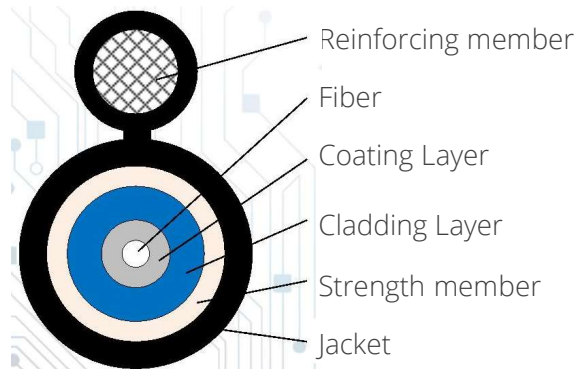
- Small diameter (2.5mm)
- Light weight (6.5kg/km)
- Good short-term tensile performance (150N)
- Wide application temperature range (-40 ~60C)
- Good wind ability
- All-dielectric flame retardant and mature prefabricated end technology and
- Matching fast connector

### Product image

GJFJH and GJYFJH Cable Structure



GJYFJCH Cable Structure



### Performance

Part Number	Description	Fiber Count	Outer Diameter(mm)
DFGJFJH-01	Indoor circular drop cable	1	2.5
DFGJFJH-01	Indoor/outdoor circular drop cable	1	3.0
DFGJYFJCH-01	Indoor/outdoor self-supporting circular drop cable	1	3.0



01

Fiber Optical  
Accessories

# 1.Optical Fiber Pigtail

## Description

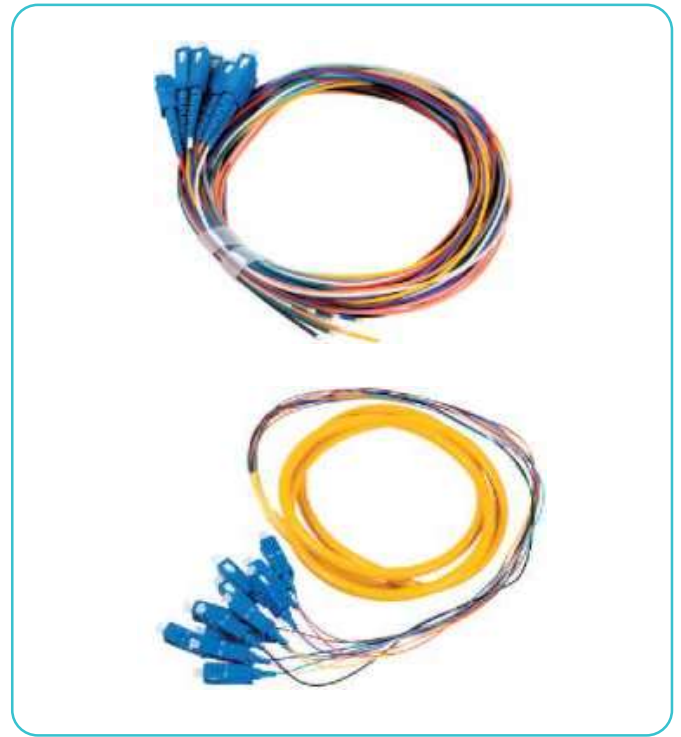
Defang Company Optical Fiber Pigtail is a length of fiber permanently attached connector only at one end. It includes various types of connectors (such as FC, SC, ST, LC, MU, MTRJ etc.). There are three kinds of polished fiber end-face of the connector: PC, UPC and APC.

We employ advanced technique and equipment to manufacture so as to ensure the high quality of mass production.

## Feature

- High Return Loss .Low Insertion Loss.
- Good Repeatability.
- Good Exchangeability.
- High Temperature Stability.

## Product image



## Specification

OD of cable	Φ0.9,Φ2.0,Φ3.0			
Cable Type	PVC LSZH,QFNP			
Fiber Type	9/125um,50/125,62.5/125			
Connector Type	FC LC,SC,ST,MU,MTRJ,MPO,E2000			
Ceramic Ferrule	PC(SM)	UPC(SM)	APC(SM)	PC(MM)
Insertion Loss(dB)	<0.20	<0.20	<0.20	<0.30
Repeatability(dB)	<0.10			
Changeability(dB)	<0.20			<0.30
Return Loss(dB)	>45	>50	>60	>40

Part Number	Description
DFPTAPC1M-01	PIGTAIL 1F 0.9MM G657A1,LSZH 1M WHITE SCAPC ONE END

## 2. Optical Fiber Patch Cord

### Description

Defang Company Optical Fiber Patch Cord is a length of fiber permanently attached connector at two ends. It includes various types of connectors (such as FC, SC, ST, LG, MU, MTRJ etc.). There are three kinds of polished fiber end-face of the connector: PC, UPC and APC.

We employ advanced technique and equipment to manufacture so as to ensure the high quality of mass production.

### Feature

- High Return Loss, Low Insertion Loss.
- Good Repeatability.
- Good Exchangeability.
- High Temperature Stability.

### Product image



### Specification

OD of cable	Φ0.9,Φ2.0,Φ3.0			
Cable Type	PVC LSZH,QFNP			
Fiber Type	9/125um,50/125,62.5/125			
Connector Type	FC LC,SC,ST,MU,MTRJ,MPO,E2000			
Ceramic Ferrule	PC(SM)	UPC(SM)	APC(SM)	PC(MM)
Insertion Loss(dB)	<0.20	<0.20	<0.20	<0.30
Repeatability(dB)	<0.10			
Changeability(dB)	<0.20			<0.30
Return Loss(dB)	>45	>50	>60	>40

Part Number	Description
DFPCAPC01M-01	Jumper Cable SC/ACP to SC/APC L=1m OD:2mm, LSZH YELLOW

# 3. Fast Connector

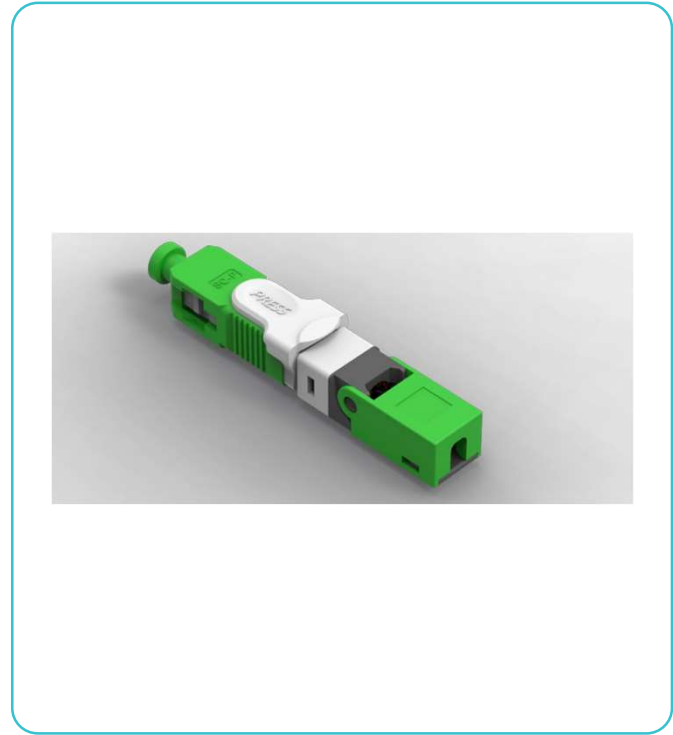
## Description

Defang Company Field Assembly Connector (Fast Connector) adopts the newest fiber terminal technology. The optical and mechanical properties are all up to the standard jump cable. It provides powerful technical support for FTTH access. The key tech is that pre-installed fiber and inserted fiber connect by matching gel in the groove. It could keep fiber won't be changed by varies temperature, to minimize the insertion loss.

## Feature

- Field installable, high reliability.
- Fiber pre-installed, no polishing required
- Compact size, lightweight.
- Suitable for drop cable and pigtail to home

## Product image



## Specification

Part Number	Description
DFESC250D-APC	...
Item	Parameter
Cable Scope	3.0 x 2.0 mm and 1.6*2.0mm Bow-type Drop Cable
Size:	52*9*7.4mm
Fiber Diameter	125µm ( 652 & 657 )
Coating Diameter	250µm
Mode	SM
Operation Time	about 15s (exclude fiber presetting)
Insertion Loss	Average 0.3dB (1310nm & 1550nm)
Return Loss	≤ -55dB for APC
Success Rate	>98%
Reusable Times	>10times
Tighten Strength of Naked Fiber	>5N
Tensile Strength	>30 N (2min)
Temperature	-40 ~ +85°C
On-line Tensile Strength Test (20 N)	IL<0.3dB
Mechanical Durability (500 times)	IL<0.3dB

# 4. PLC OPTICAL SPLITTER

## Description

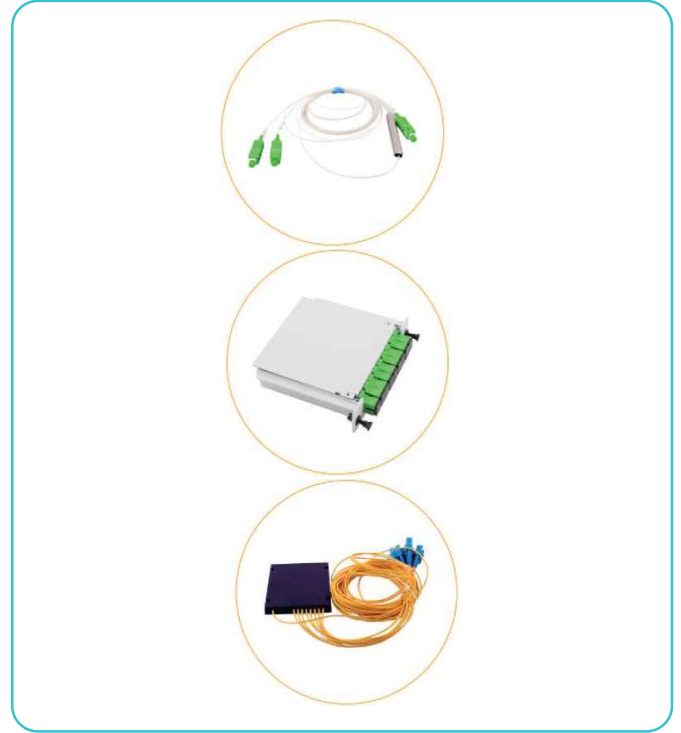
Defang Company Planar Light wave Circuits (PLC) Optical Splitter are fully passive optical branching devices that exhibit very low insertion loss and PDL, great channel uniformity and a wide wavelength operative range. These splitters are manufactured and tested to Telcordia-1209-core & GR-1221-core & YD/T2000.1-2009 to provide high performance, specifically designed to meet the tough requirement of FTTH network.

## Feature

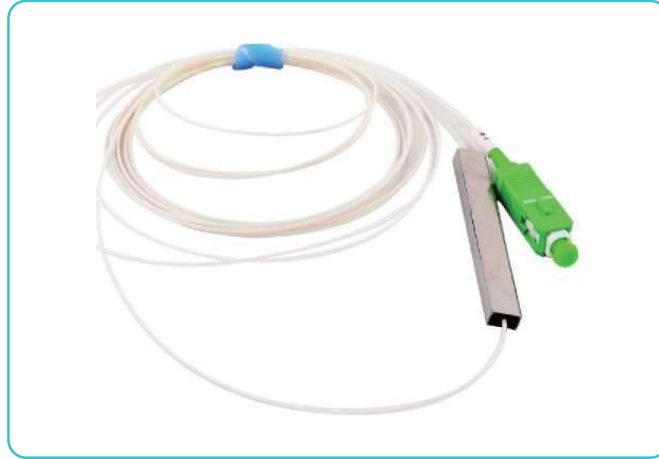
- Low insertion loss, High uniformity.
- High reliability and stability.
- Compact & small size, Optimal input & output.

## Specification

## Product image



# 4.PLC OPTICAL SPLITTER



Wavelength (nm) 1260-1650

Parameters	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32	2x64
Size(mm)L*W*H	60*4*4	60*7*4		60*12*4	80*20*6	100*40*6	60*4*4	60*7*4		80*12*4	80*20*6	100*40*6
Insertion Loss(≤dB)	4.1	7.4	10.5	13.8	17.1	20.4	4.4	7.7	10.8	14.1	17.1	20.7
PDL(≤dB)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Uniformity(≤dB)	0.8	0.8	0.8	1.0	1.5	2.0	0.8	1.0	1.0	1.5	2.0	2.5

Return Loss(dB) APC>55, UPC>50

Directivity (dB) 255

Temperature Range(°C) -40-85

Storage Temperature(°C) -40-85

Part Number	Description
DFPLC4F05B-01	PLC 1X4 SPLITTER NO CONNECTOR LENGTH:1.5M

# 4.PLC OPTICAL SPLITTER



Wavelength (nm) 1260-1650

Parameters	1x2	1x4	1x8	1x16	1x32	1x64	2x2	2x4	2x8	2x16	2x32	2x64
Size(mm)L*W*H		130*100*25		130*100*50	130*100*102	130*100*206		130*100*25		130*100*50	130*100*102	130*100*206
Insertion Loss(≤dB)	4.1	7.4	10.5	13.8	17.1	20.4	4.4	7.7	10.8	14.1	17.1	20.7
PDL(≤dB)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Uniformity(≤dB)	0.8	0.8	0.8	1.0	1.5	2.0	0.8	1.0	1.0	1.5	2.0	2.5
Return Loss(dB)	APC>55, UPC>50											
Adapter Type	SC,FC ,LC											
Directivity(dB)	55											
Temperature Range(°C)	-40-85											
Storage temperature(°C)	-40-85											

Part Number	Description
DFCAPLC8F-01	CASSETTE PLC 1X8 SPLITTER SCAPC CONNECTOR

# Contact Information



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