Version **GFS-8X-16 V1.0**

Technical Specification

Pre-connectorized Fiber Optic Cable Distribution Box

GFS-8X-16

Customer Approval			
	Name	**Signature**	**Date**
Approved by			

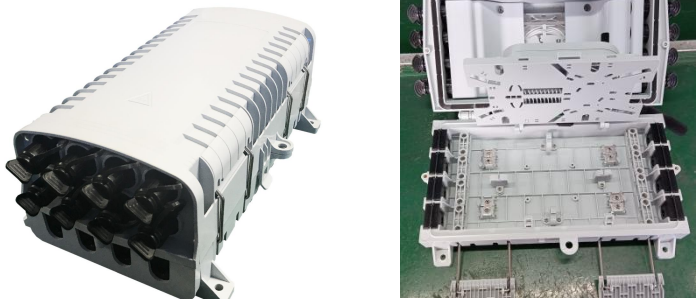
Contents

1. General

1.1 Description

Pre-connectorized optical distribution box as the most advanced FTTX network distribution node equipment, provide quick and reliable connection, good protection and management for the FTTX network.

Production type	Classification
GFS-8X-16	Pre-connectorized fiber optic cable distribution box



Pic.1 GFS-8X-16

1.2 Standards Comply

The product is manufactured and tested according to the standards as follows:

IEC 62134-1-2002	Fiber optic enclosures - Part 1: Generic specification
IEC61300-2	Fiber optic interconnecting devices and passive components - Basic test and measurement procedures
IEC60068-2	Basic environmental testing procedures for electric and electronic products

1.3 Applications Environment

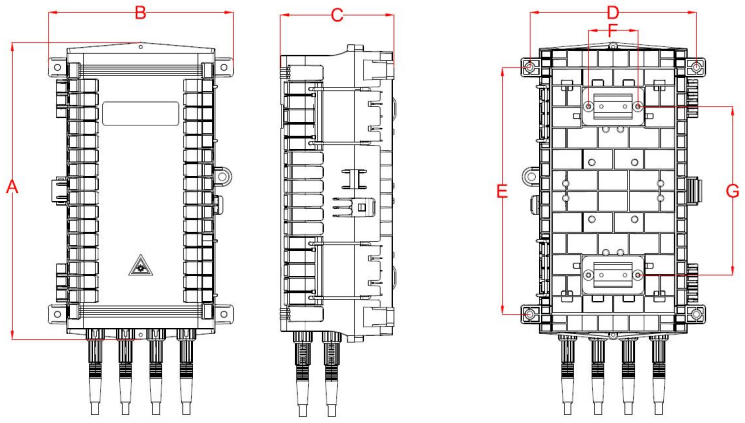
Item	Value
Operation temperature	-40 ºC～+65 ºC
Installation temperature	-15 ºC～+40 ºC
Storage temperature	-45 ºC～+75 ºC
Relative humidity	≤85% (+30℃)
Atmospheric pressure	70KPa~106Kpa

2. Characteristics

1. Advanced structure design, easy operation and reasonable routing.
2. Material: PC+ABS/PP.
3. Moisture proof, waterproof, dust-proof, anti-aging.
4. Protection level up to IP65.
5. 8 in / out cable holes, 16 pre connected adapters.
6. Installation method: pole-mounted, aerial-mounted, wall-mounted.
7. It can be equipped with drop cable storage tray to meet the storage of 50 meters 5mm round cable.

3. Specifications

3.1 Mechanical specifications



Pic.2 GFS-8X-16

Item	Specifications	Remark
Material of housing	PC+ABS/PP	
Material of internal components	PC+ABS/ABS	
Material of metal accessory	High-quality stainless steel	
External dimension(mm)	313*195*120 mm	A*B*C
Installation hole position(mm)	175.5*260.2*52*177.6 mm	D*E*F*G
Color	Black/ Gray	According to customer requirements

Number of cable port	8	
Fiber cable dimension of cable port (mm)	Φ5−Φ17	
Number of Pre-connectorized adaptors	16	8 Black(Default)
Fusion capacity(Max)	68	Tray A ,24x2=48, 2 layers of heat-shrinkable splice protection sleeve.
		Tray B ,20x1=20, 2 layers of heat-shrinkable splice protection sleeve.
Micro PLC Splitter	1x2	Splitter size：60x7x4mm. Tray A , 2pcs*2; Tray B , 2pcs; Fiber storage disk:2 pcs.
	1x4	
	1x8	
IP grade	IP65	
Flammability	UL-94HB(Default)	
Neutral salt spray test (NSS)	48h	

3.2 Optical specifications

Model	Splitter or pigtail	IL(dB)-Splitter	RL(dB) -Splitter	IL(dB)-Distribution box	Test method
GFS-8X-16	Pigtail-SC/APC-00-SM-SX(1C1F)-OD0.9MM-PVC-G657A2-Cable Color(Defaults)-Indoor-RoHS-1.5m	≤0.3	≥55dB	≤0.5	IL: IEC61300-3-4 Method B RL: IEC61300-3-6 Method 1
	1x2 PLC Splitter, with SCAPC connector	≤4.0	≥55dB	≤4.2	
	1x4 PLC Splitter, with SCAPC connector	≤7.4	≥55dB	≤7.6	
	1x 8 PLC Splitter, with SCAPC connector	≤10.5	≥55dB	≤10.7	
	1x 16 PLC Splitter, with SCAPC connector	≤13.5	≥55dB	≤13.7	

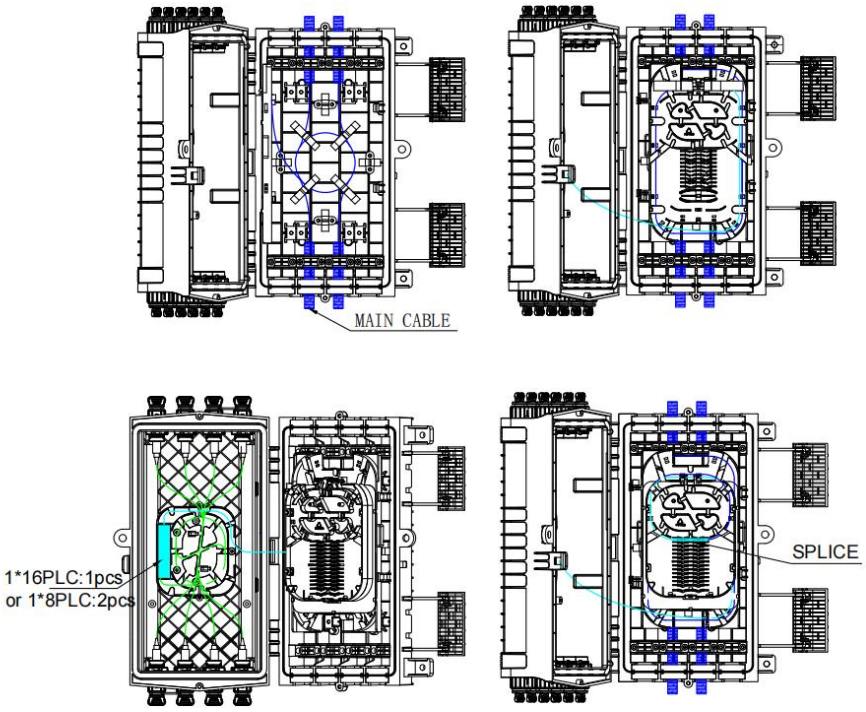
The optical parameters shown in the table above are default values, and can be customized according to requirements.

3.3 Port color

Red	Blue	Green	Yellow

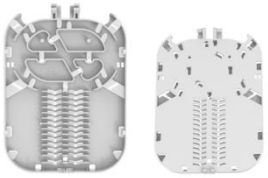
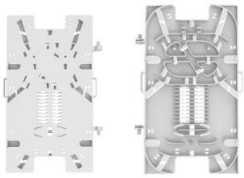
The color of the product may vary and is for reference only.

4. Routing diagram



Pic.2 GFS-8X-16 routing

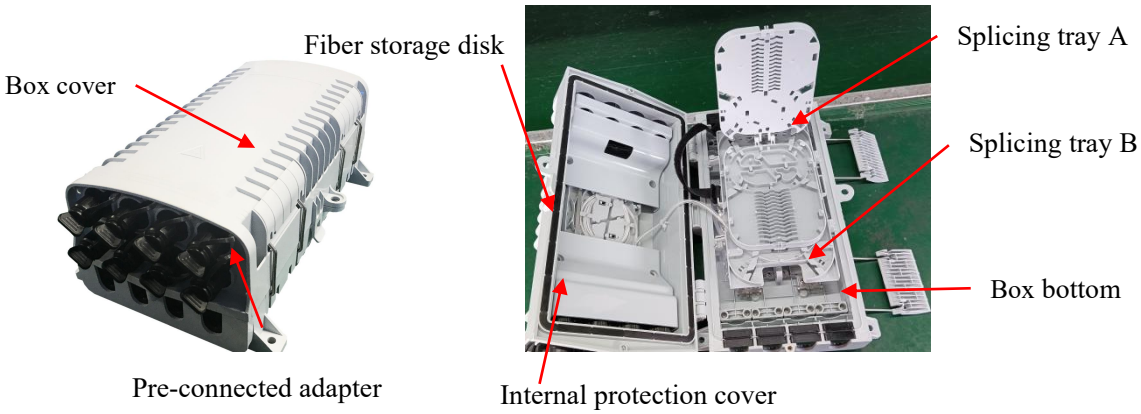
5. Splicing tray

Item	Splicing tray A	Splicing tray B
Dimensions(H x W x D; mm)	139x101 x 20	201 x 128 x 19
Net weight (kg)	0.037	0.066
Picture		
Color	RAL7035	RAL7035
Material	PC+ABS	PC+ABS
Splicing capacity of a tray(cores)	24 (2 layers of heat shrinkable protective sleeve), 2 slot for 1/8 PLC	20(2 layer of heat shrinkable protective sleeve), 2 slot for 1/8 PLC
Default(PCS)	2	1

6. Configuration

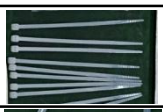
6.1 Main parts

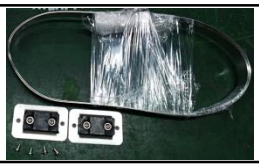
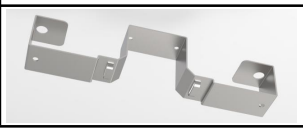
No.	Part name	Unit	Quantity	Remark
1	Box bottom	pcs	1	
2	Box cover	pcs	1	
3	Splicing tray A	pcs	2	
4	Splicing tray B	pcs	1	
5	Internal protection cover	pcs	1	
6	Pre-connected adapter	pcs	8	Black



Pic.3 Structure of GFS-8X-16

6.2 Accessories

No.	Part name	Reference picture	Unit	Quantity	Remark
1	Users' manual	/	pcs	1	EN
2	Splitter test report	/	pcs	1	EN
3	Heat-shrinkable protection sleeve		pcs	8	L=45mm
4	Nylon cable tie		pcs	10	3x100mm
5	Bare fiber protection tube		pcs	1	OD4mm x 50cm
6	Wall-mounted kit		set	1	Optional as customer's request. (Expanded plastic plug Φ7.5x40mm, Phillips self-

					tapping screws M5x40mm.)
7	Pole-mounted kit		set	1	Optional as customer’s request
8	Aerial-mounted kit		set	1	Optional as customer’s request
9	Drop cable storage tray		pcs	2	Optional as customer’s request

7. Installation

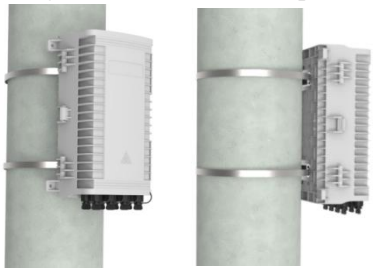
7.1. Wall-mounted installation

Drill 4 holes on the wall according to the size of the bottom wall hanging, place the expansion plug Φ 7.5 * 40, place the box to match the hole, and fasten with screws. (Pic.4)

Pic.4 Wall mounted installation

7.2. Pole-mounted installation

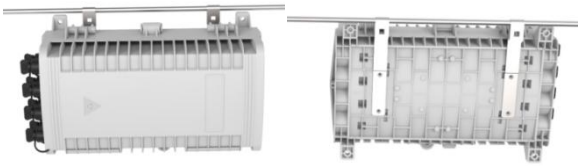
Pass the stainless steel belt through the slot of the back plate and fix it on the pole (Pic.5)



Pic.5 Pole-mounted installation

7.3. Aerial-mounted installation

Hang the hook on the messenger, and tighten the bolts and nuts of the hook.(Pic.6)



Pic.6 Aerial-mounted installation

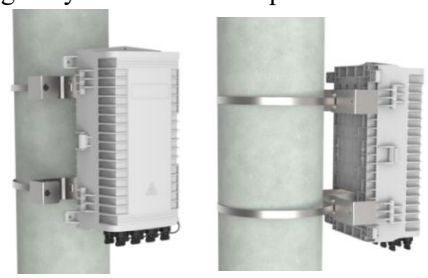
7.4. Wall-mounted installation（With drop cable storage tray)

Install the drop cable storage tray on the back of the box；Drill 4 holes in the wall according to the dimension of the drop cable storage tray mounting hole, place the expansion plug Φ 7.5 * 40, place the box to match up the holes, and fasten with the screws. (Pic.7)

Pic.7 Wall-mounted installation（With drop cable storage tray)

7.5. Pole-mounted installation (With drop cable storage tray)

Install the drop cable storage tray on the back of the box；Pass the stainless steel belt through the slot of the drop cable storage tray and fix it on the pole with buckle. (Pic.8)



Pic.8 Pole-mounted installation（With drop cable storage tray)

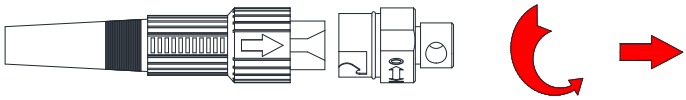
7.6. Aerial-mounted installation (With drop cable storage tray)

Install the drop cable storage tray on the back of the box；Use the small metal plate to fix the distribution box to the messenger. (Pic.9)

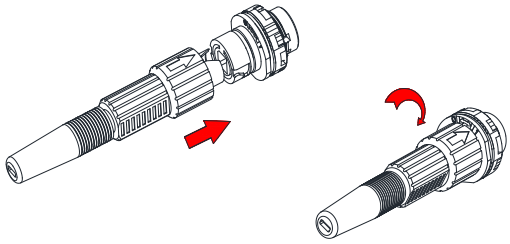
Pic.9 Aerial-mounted installation（With drop cable storage tray)

8. Connector operation

8.1 Pre-connected adapter - A（ E）



Rotate the arrow part of fiber connector counterclockwise and take out the dust cap.



The arrow part of fiber connector is above, insert fiber connector into the socket and then rotate the arrow part clockwise.

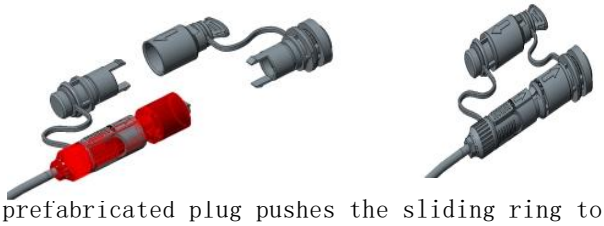
8.2 Pre-connected adapter - B（XL）

- Insert the SC optical fiber connector plug through the loose parts in turn, and then plug it into the adapter;
- Install XL pre connected adapter sheath on adapter with plastic key;
- Insert the plug of the snap spring into the sheath;
- The cable clamp shall be installed and the line shall be close to the plug;
- Screw the leather cable clamp seat cap on the sheath clockwise.

8.3 Pre-connected adapter - C

- Push the sliding ring on the optical fiber preformed plug in the direction of the arrow to remove the dust cap; press the button to take out the dust cap on the adapter in the direction of the arrow.

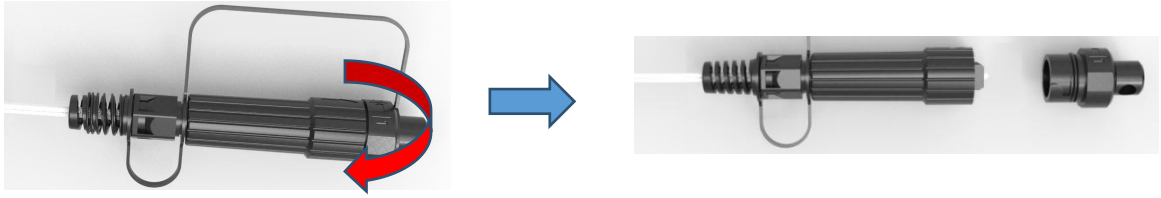
- Align the body of the preformed plug with the adapter buckle until it is fastened. Connect the two dust covers in the same way.



- The installed prefabricated plug pushes the sliding ring to release the buckle, and then pull the main body backward to separate it.

8.4 Pre-connected adapter - D

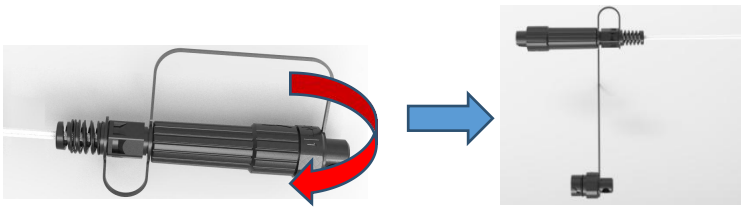
- Turn the pre connected plug anti clockwise and open the pre connected plug and dust cover in the direction of the arrow.



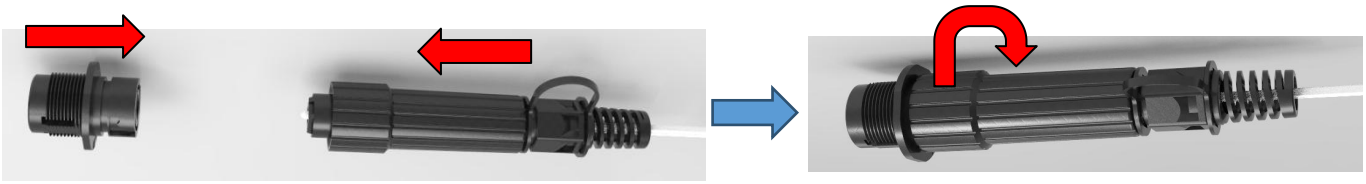
- Connect the pre connected plug D and the pre connected adapter D in the direction of the arrow, and rotate the plug clockwise to fix it.

8.5 Pre-connected adapter - E (A)

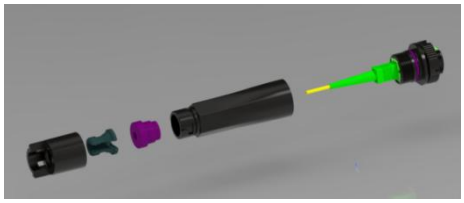
- Turn the pre connected plug anti clockwise and open the pre connected plug and dust cover in the direction of the arrow.



- Connect the pre connected plug E and the pre connected adapter E in the direction of the arrow, and rotate the plug clockwise to fix it.

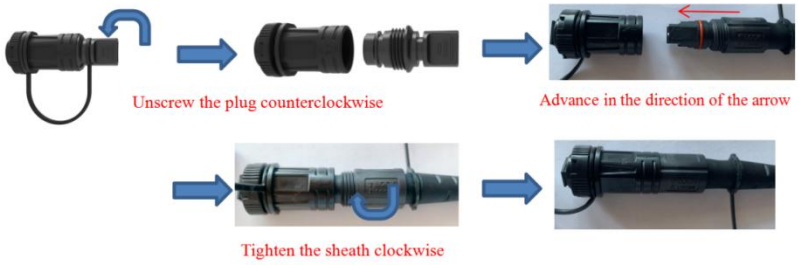


8.6 Pre-connected adapter - F



- Insert the SC optical fiber connector plug through the loose parts in turn, and then plug it into the adapter;
- Install XL pre connected adapter sheath on adapter with plastic key;
- Insert the plug of the snap spring into the sheath;
- The cable clamp shall be installed and the line shall be close to the plug;
- Screw the leather cable clamp seat cap on the sheath clockwise.

8.7 Pre-connected adapter - G



9. Package

Item	Material	Size(mm)	Quantity	Gross weight(kg)
Independent product packaging	Carton	360x215x130	1	1.6
Outer packaging carton	Carton	450x380x685	10	17
Note: Without drop cable storage tray				

10. Environmental characteristics

This product complies with the RoHS environmental protection directive, and the content of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) does not exceed the limit.