

Technical Specification

Pre-connectorized Fiber Optic Cable Distribution Box

GFS-8BY-1-BC&2-BC

Yangtze Optical Fibre and Cable Joint Stock Limited Company

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Customer Approval			
	Name	Signature	Date
Approved by			

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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-8BY-1-BC&2-BC	Pre-connectorized Fiber optic cable distribution box



1.2 Standards Comply

The production offered by YOFC are designed, manufactured and tested according to the standards as follows:

Fiber optic interconnecting devices and passive components - Basic test and IEC61300-2 measurement procedures

Standard for tests for flammability of plastic materials for parts in devices and UL 94 appliances.

Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of NonASTM G-155

Metallic Materials.

IEC60068-2 Basic environmental testing procedures for electric and electronic products

1.3 Applications Environment

Item	Value
Operation temperature	-40 °C~+65 °C
Installation temperature	-15 °C~+40 °C

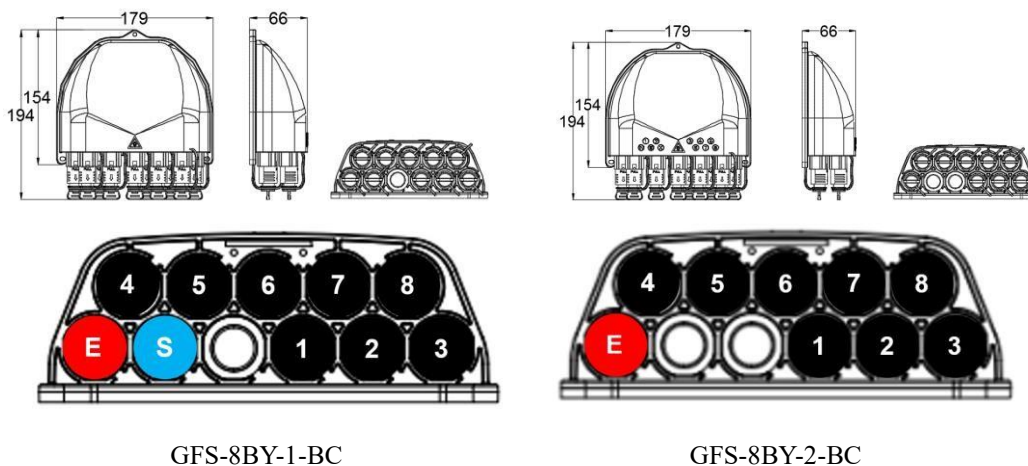
Storage temperature	-45 °C~+75 °C
Relative humidity	≤85% (+30°C)
Atmospheric pressure	70KPa~106Kpa

2. Characteristics

1. Totally enclosed structure, the bottom shell and upper cover are welded by ultrasonic welding, which is non-detachable.
2. Material: PP+GF or PC+ABS.
3. Moisture proof, waterproof, dust-proof, anti-aging.
4. Protection level up to IP68.
5. The interior is equipped with 1x2 FTB splitter, 1x8 PLC splitter.
6. Installation method: pole-mounted, aerial-mounted, wall-mounted, hand hole, man hole, etc. Note that PC+ABS materials are not suitable for use in underground environments.
7. It can be equipped with drop cable storage tray to meet the storage of 30 meters 5mm round cable.

3. Specifications

3.1 Mechanical specifications



Pic.2 GFS-8BY-1-BC/2-BC

Item	Specifications	Remark
Material of housing	PP+GF or PC+ABS	

Material of internal components	PC+ABS/ABS	
Material of metal accessory	High-quality stainless steel	
External dimension(mm)	171*179*71mm	A*B*C
Color	Black	
Number of Pre-connectorized	10	GFS-8BY-1(1 Red,1 Blue,8 Black)

adaptors	9	GFS-8BY-2(1 Red,8 Black)
Splitter	1x2 FTB splitter+ 1x8 PLC splitter	GFS-8BY-1,default ratio of 1x2 FBT splitter is 70%/30%
	1x8 PLC splitter	GFS-8BY-2
IP rating	IP68	IEC 61300-2-23
Flammability	UL94-HB	UL 94
Neutral salt spray test (NSS)	168h	IEC 61300-2-26:2006
UV resistant	720h	ASTM G-155

3.2 Optical specifications

Model	Splitter	IL(dB)		RL(dB)	Test method
GFS-8BY-1	1*2 FTB(70/30)@ 1310nm,1490nm,1550nm + 1* 8 PLC Splitter , with SCAPC connector	1*2 FTB(70%)	≤1.8	≥55	IL: IEC61300-3-4 Method B RL: IEC61300-3-6 Method 1
		1*2 FTB (30%) +1* 8 PLC	≤16.8	≥55	
	1*2 FTB(50/50)@ 1310nm,1490nm,1550nm + 1* 8 PLC Splitter , with SCAPC connector	1*2 FTB(50%)	≤3.8	≥55	
		1*2 FTB (50%) +1* 8 PLC	≤14.0	≥55	
GFS-8BY-2	1* 8 PLC Splitter, with SCAPC connector	1* 8 PLC	≤10.8	≥55	

PDL < 0.15Db ;

Directivity>55dB

3.3 Port color

Red	Blue	Black

Port: E Note: Adaptor body and dust cap are all red.	Port: S Note: Adaptor body and dust cap are all blue.	Port: 1~8 Note: Adaptor body and dust cap are all black.
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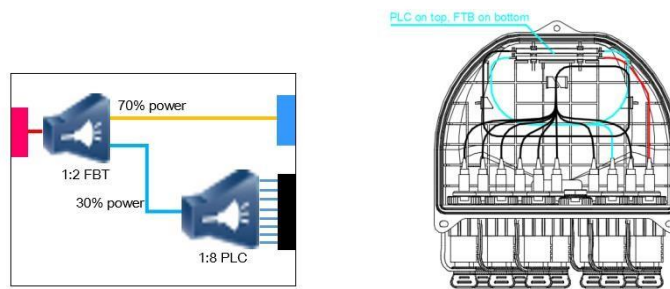
The color of the products may vary and is for reference only.

3.4 Color of dust cap connecting belt

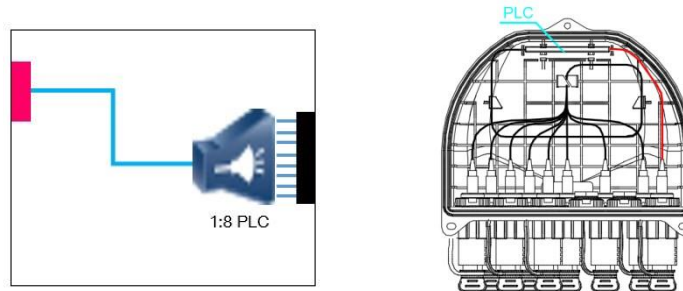
Model	Splitter	Color of dust cap connecting belt	Remark
GFS-8BY-1	1*2 FTB(70/30) + 1* 8 PLC Splitter	Blue	
	1*2 FTB(50/50) + 1* 8 PLC Splitter	Red	
GFS-8BY-2	1* 8 PLC Splitter, with SCAPC connector	Black	

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

4. Routing diagram



Pic.4 GFS-8BY-1-BC routing



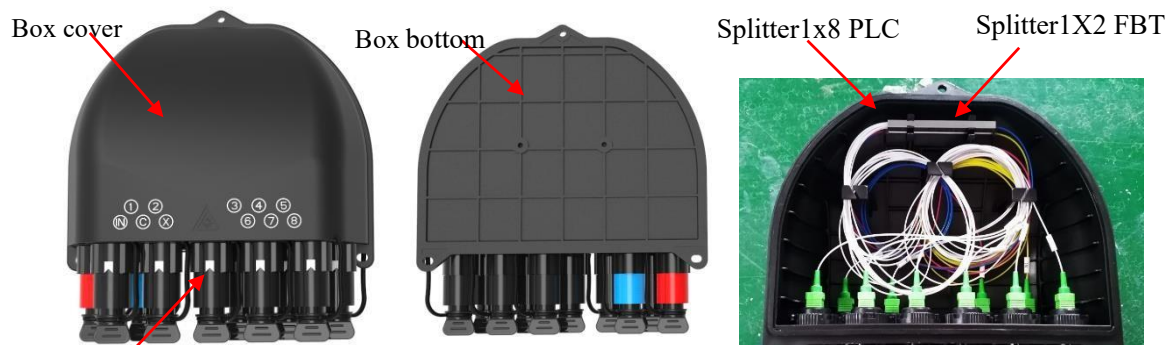
Pic.5 GFS-8BY-2-BC routing

5. Configuration

5.1 Main parts

No.	Part name	Unit	Quantity	Remark
1	Box bottom	pcs	1	
2	Box cover	pcs	1	
3	Pre-connected adaptor	pcs	10	GFS-8BY-1

4		pcs	9	GFS-8BY-2
5	Splitter1x2 FBT	pcs	1	Only installed in GFS-8BY-1
6	Splitter1x8 PLC	pcs	1	



Pre-connected adaptor

Pic.6 Structure

5.2 Accessories

No.	Part name	Reference picture	Unit	Quantity	Remark
1	Users' manual	/	pcs	1	ES
2	Splitter test report	/	pcs	1	EN
3	Wall-mounted kit		set	1	Expanded plastic plug Φ8x40mm, Phillips self-tapping screws M5x40mm.
4	Pole-mounted kit		set	1	
5	Aerial-mounted kit		set	1	
6	Drop cable storage tray		set	1	

6. Installation

6.1. Wall-mounted installation

Drill 3 holes in the wall according to the dimension in table 2, place the expansion plug $\Phi 7.5 \times 40$, place the box to match up the holes and use screws to fasten. (Pic. 7)



Pic.7 Wall mounted installation

6.2. Pole-mounted installation

Pass the stainless steel belt through the slot of the back plate and fix it on the pole (Pic. 8)



Pic.8 Pole-mounted installation

6.3. Aerial -mounted installation

Hang the hook on the messenger, and tighten the bolts and nuts of the hook.(Pic.9)



Pic.9 Aerial-mounted installation

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

Drill 2 holes in the wall according to the dimension of the drop cable storage tray mounting hole, place the expansion plug $\Phi 8 \times 40$, place the box to match up the holes, and fasten with the screws. (Pic. 10)



Pic.10 Wall-mounted installation
(With drop cable storage tray)

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

Pass the stainless steel belt through the slot of the drop cable storage tray and fix it on the pole with buckle. (Pic. 11)



Pic.11 Pole-mounted installation
(With drop cable storage tray)

7. Package

Item	Material	Size(mm)	Quantity	Gross weight(kg)
Independent product packaging	Carton	195x195x95	1	0.7
Outer packaging carton	Carton	810x410x510	40	28.1
Note: Without drop cable storage tray				