

Technical Specification
Optical Fiber Cable Distribution Box
MCR ODB-16X3



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1. General

1.1 Description

The equipment is used as a termination point for the feeder cable to connect with drop cable in FTTx communication network system. The fiber splicing, splitting, distribution can be done in this box, and meanwhile it provides solid protection and management for the FTTx network building.

Production type	Classification
MCR ODB-16X3	Optical fiber cable distribution box



Appearance of MCR ODB-16X3

1.2 Standards Comply

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

ITU-T G.652	Characteristics of a single-mode optical fibre
IEC 60794-1-1	Optical fibre cables-part 1-1: Generic specification-General
IEC 60794-1-2	Optical fibre cables-part 1-2: Generic specification-Basic optical cable test procedure

1.3 Applications Environment

Item	Value
Operation temperature	-40 °C~+65 °C
Installation temperature	-5 °C~+40 °C
Storage temperature	-40°C~+65 °C
Atmospheric pressure	70~106Kpa
Relative humidity	≤93%(+40°C)

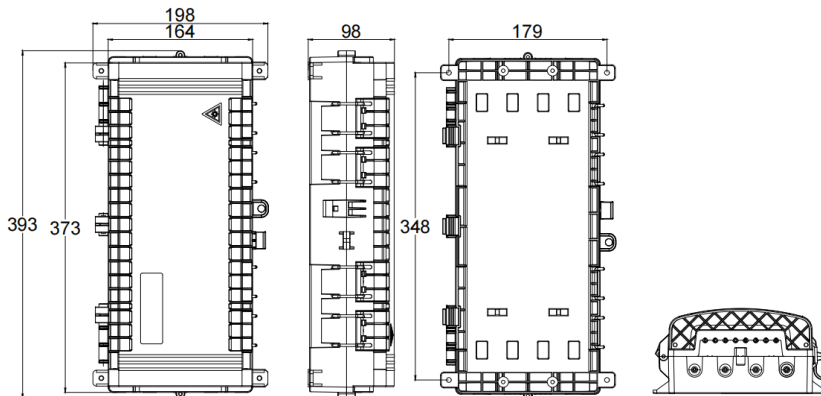
2. Characteristics

- 2.1. Advanced structure design, easy operation and reasonable routing.
- 2.2. Material: PP or PC+ABS.
- 2.3. Moisture proof, waterproof, dust-proof, anti-aging.
- 2.4. Protection level up to IP65.
- 2.5. 8 cable entry.
- 2.6. Installation method: , aerial-mounted.

3. Specifications

3.1 Mechanical specifications

Item	Specifications	Remark
External dimension(mm)	393*198*98(A*B*C)	
Color	PANTONE 428C	Customizable
Size and quantity of optical cable hole	8 cable entry	
Fusion capacity(Max)	18	
Micro PLC Splitter	2 x 1:8micro splitter	Splitter size : 60x7x4mm.
Into the largest cable diameter (mm)	∅7~16	
Cable outlet size(mm)	2*3~∅5	
IP protection level	IP65	
Flammability	HB	It can be customized according to needs.
Neutral salt spray test (NSS)	48 h	



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4. Configuration

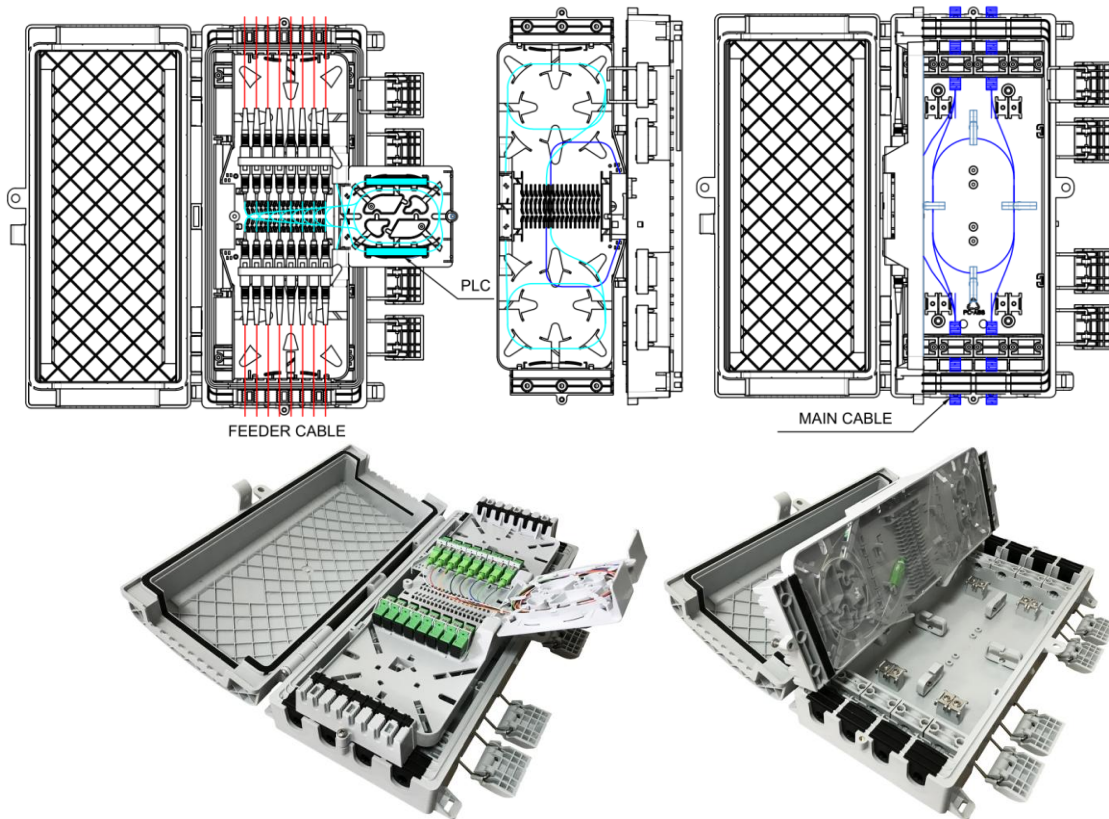
4.1 Main optical parameters

Splitter or pigtail	IL(dB)	RL(dB)	IL(dB)	Test method
	Pigtail/Splitter		Distribution box	
Pigtail-SC/APC-00-SM-SX(1C1F)-OD0.9MM-PVC-G657A2-Cable Color(Default)-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.

5. Product Picture


5.1 Product cable ways:







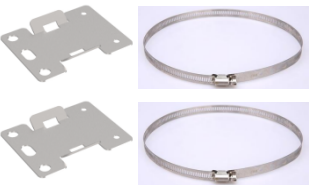

MCR ODB-16X3 routing diagram

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5.2 Splicing tray

Item	Splicing tray A
Dimensions(H*W*D, m m)	394 X 128 X 39
Net weight (kg)	0.19
Picture	
Color	PANTONE 428C
Material	ABS
Splicing capacity of a tray(cores)	18 (2 layers of heat shrinkable protective sleeve)
Splitter capacity of a tray(PCS)	2 (PLC 1X8, 0.9mm fiber,60x7x4mm) o
Maximum(PCS)	1
Default(PCS)	1

5.3 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	16	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

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6.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.

7. Installation:

7.1. Wall-mounted installation

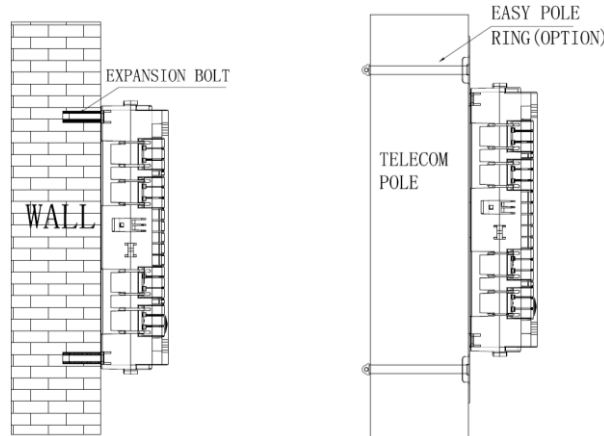
Drill 4 holes into the wall based on the size in table 1, place the expansion bolt $\Phi 7.5 \times 40$, place the box to match the holes and use bolt to fasten. (Pic 3)

7.2. Pole-mounted installation

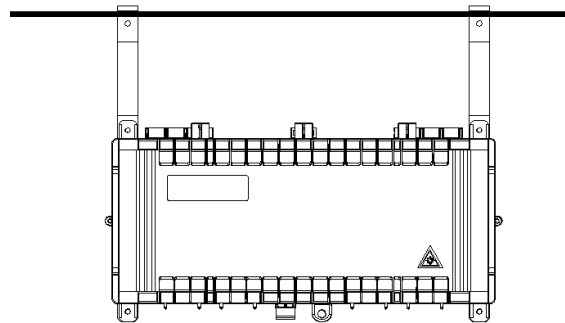
Fix 1 set of the pole ring to the telecom pole (Pic 4)

7.3. The overhead structure

Tie the two installed on the chassis of the overhead hung on the wire, and then bolted, prevent the case fall off.(Pic 5)



Pic 3 Wall mounted installation Pic 4 Pole mounted installation



Pic 5 The overhead structure

8.Package

Item	Material	Size(mm)	Quantity	Gross weight(kg)
Independent product packaging	Carton	390*215*105	1	2.2
Outer packaging carton	Carton	450*410*560	10	23
Note: Without drop cable storage tray				