

GF378-ODB-POPMV-2A Series Fiber Distribution Box

Technical Specification

V1.0

Version	Upgrading Reason	Date	Maker	
V1.0	1 st . version	27 th . 06.2018	Qi Wang	

Catalogue

1	DESCRIPTION.....	2
2	APPLICABLE ENVIRONMENT.....	2
3	FEATURE.....	2
4	STRUCTURE & DIMENSION.....	3
5	OPTICAL PERFORMANCE.....	4
6	MECHANICAL PERFORMANCE.....	6
7	MATERIAL.....	6
8	PACKAGE.....	6
9	INSTALLATION.....	7
10	ORDER GUIDE.....	12

1 Description

SINDI's GF378-ODB-POPMV-2A series optical fiber distribution box (ODB) is applicable to the connection of joint point between armored cable and indoor drop cable in optical fiber access network. It has 3 installation ways for indoor and outdoor: grounding mounting, wall mounting and pole-mounting. GF-KSW-24(SY) could be used as 24ports optical fiber distribution box by connecting the armored cable and drop cable with bunchy pigtailed; or optical splitting distribution box by connecting the armored cable and drop cable with PLC splitter.

2 Applicable Environment

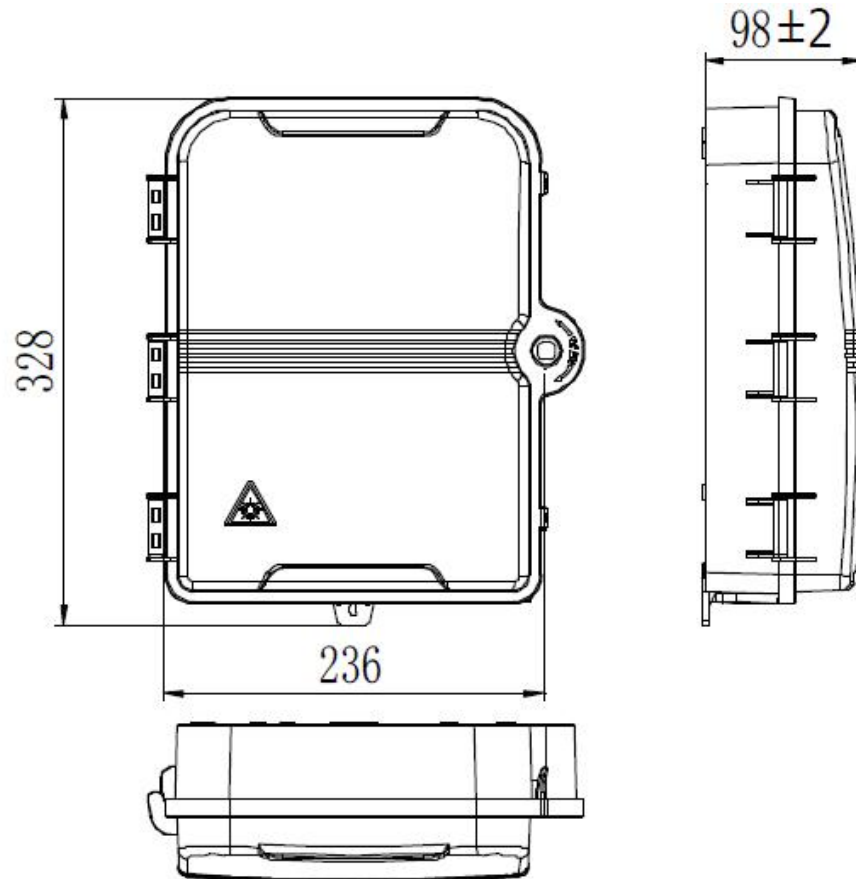
- working temperature: -40℃ ~ +75℃
- ambient humidity: ≤95 % (+40℃)
- atmospheric pressure: 70kPa ~ 106kPa

3 Feature

- Excellent plastic material, good leak-proof and weather-proof performance, applicable to indoor and outdoor with grounding mounting, wall mounting and pole-mounting installation, protective grade is IP55.
- Special fixed point for drop cable to ensure the pull force.
- Reliable cable introduction, fixation, stripping protection and grounding devices.
- Max. configure 36-core splice protection sleeves
- Turning plate design, compact and room saving, to ensure enough bending radius, support redundant fiber and reasonable fiber distribution.
- Max. Install 24pcs SC adapter.
- Available to install cassette type PLC splitter 1x4, 1x8, 1x16
- Available to install box type PLC splitter 1x8 2pcs
- Available to install mini type PLC splitter 1x8 3pcs, mini type PLC splitter 1x16 1pc

4 Structure & Dimension

1. GF378-ODB-POPMV-2A Overall structure (Unit: mm, Tolerance: ± 3 mm)



P 1 GF378-ODB-POPMV-2A ODB Dimension

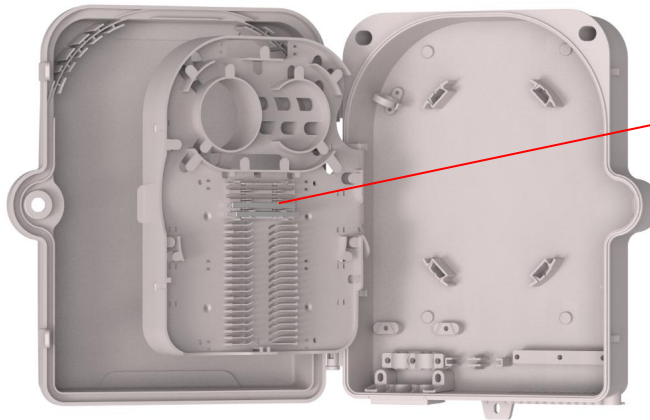


P 2 GF378-ODB-POPMV-2A ODB (for 24pcs SC adapter)



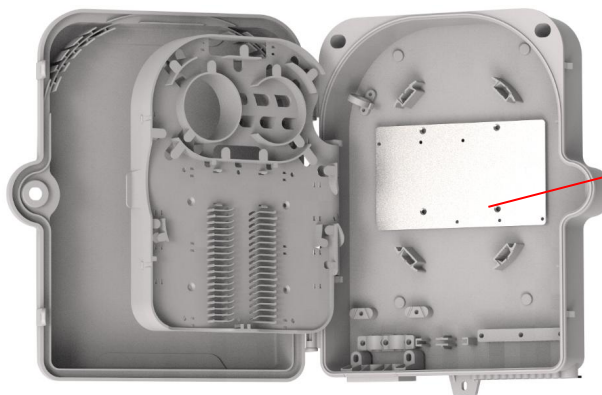
Insallation for
cassette type
PLC Splitter

P 2 GF378-ODB-POPMV-2A ODB (for 2pcs cassette PLC Splitter 1x8)



Installation panel
for mini type PLC
splitter

P 3 GF378-ODB-POPMV-2A ODB (for mini PLC Splitter 1x8 3pcs or 1x16 1pc)



Installation panel
for box type PLC
splitter

P 4 GF378-ODB-POPMV-2A ODB (for 2pcs box PLC Splitter 1x8)



Grounding cable would be configured if customer requires.



Second-splicing entrance



P 4 GF378-ODB-POPMV-2A ODB (black)



P 5 GF378-ODB-POPMV-2A ODB (Grey)

5 Optical Performance

- Nominal working wavelength: 850nm, 1310nm, 1550nm;
- IL: $\leq 0.2\text{dB}$;
- RL: SC/PC $\geq 50\text{dB}$ SC/UPC $\geq 50\text{dB}$ SC/APC $\geq 60\text{dB}$;
- Life: $\Delta\text{IL} < 0.1\text{ dB}$ after 1000times plug; outside end vertical pressure $> 100\text{N}$ (door in opening status)
- High voltage protective ground and case is insulated, insulation resistance $> 20000\text{M}\Omega/500\text{V}(\text{DC})$;
- High voltage protection between box and box $> 3000\text{V}(\text{DC})/1\text{min}$. No breakdown, no arcing

6 Mechanical Performance

- Each surface can stand vertical pressure $> 500\text{N}$;
- Connector plug in durable life $> 1000\text{times}$;

7 Material

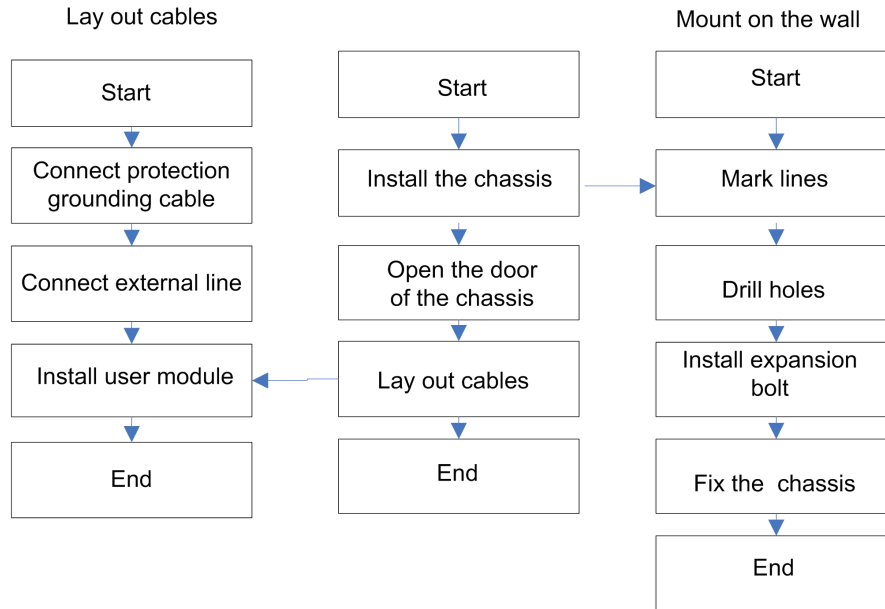
Item	Parts	Material	Surface	Remark
1	Box Body	Excellent engineer plastic	/	As customer's requirement
2	Plastic parts inside the box	Excellent engineer plastic	/	As customer's requirement

8 Package

- Carton Packing for various transporting.
- Storage temperature: $-25^{\circ}\text{C} \sim +40^{\circ}\text{C}$, relative humidity $\leq 90\%$ ($+40^{\circ}\text{C}$);
- Storage precautions: the air acidity, alkalinity or other harmful gases in the warehouse should meet the requirements of environmental protection regulations

9 Installation Flow

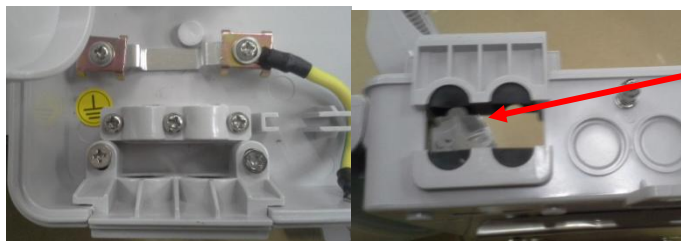
Figure 9-1 GF378-ODB-P Installation Flow



9.1 Lay out cables

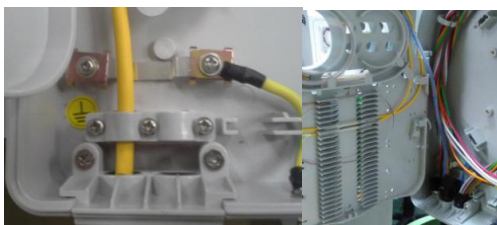
9.1.1 Distribution Cable Operation Illustration

1. Use cross screwdriver to dismantle the upper part of mid-span accessories

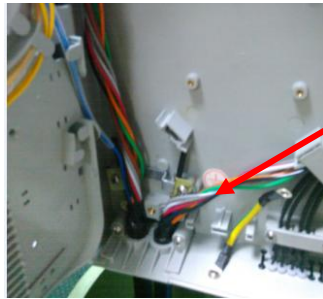


**Cable Mid-span
In & out**

2. Cable passing through the mid-span ports and shall be clamped as following:



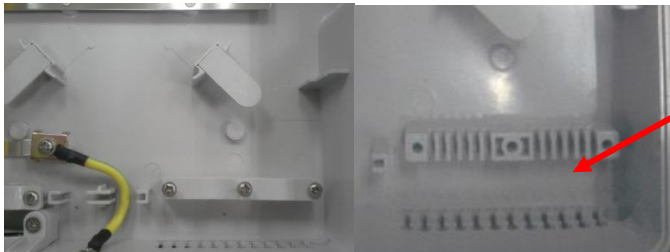
3. Fix the RFP of optical fiber cable to the metal plate for tension and strain relief;



RFP is fixed here

9.1.2 Drop Cable Operation Illustration

1. Use cross screwdriver to dismantle the upper part of drop cable fixing accessories;

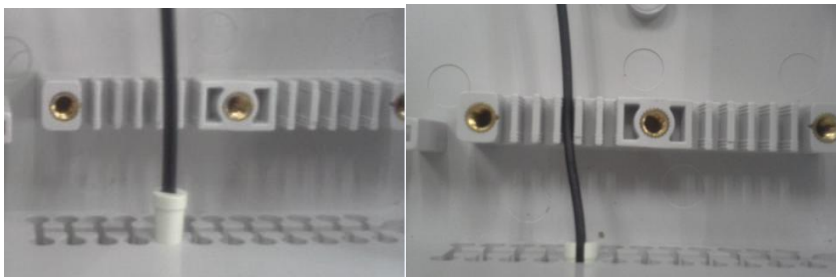


Drop cable fixing component

2. Drop cable shall pass through sealant 1 as following;



3. Insert sealant 1 into the port and fix the drop cable as following;



4. Back to step 2 and step 3 to install all the drop cable and put the upper part of drop cable fixing accessories back to the fixing position;

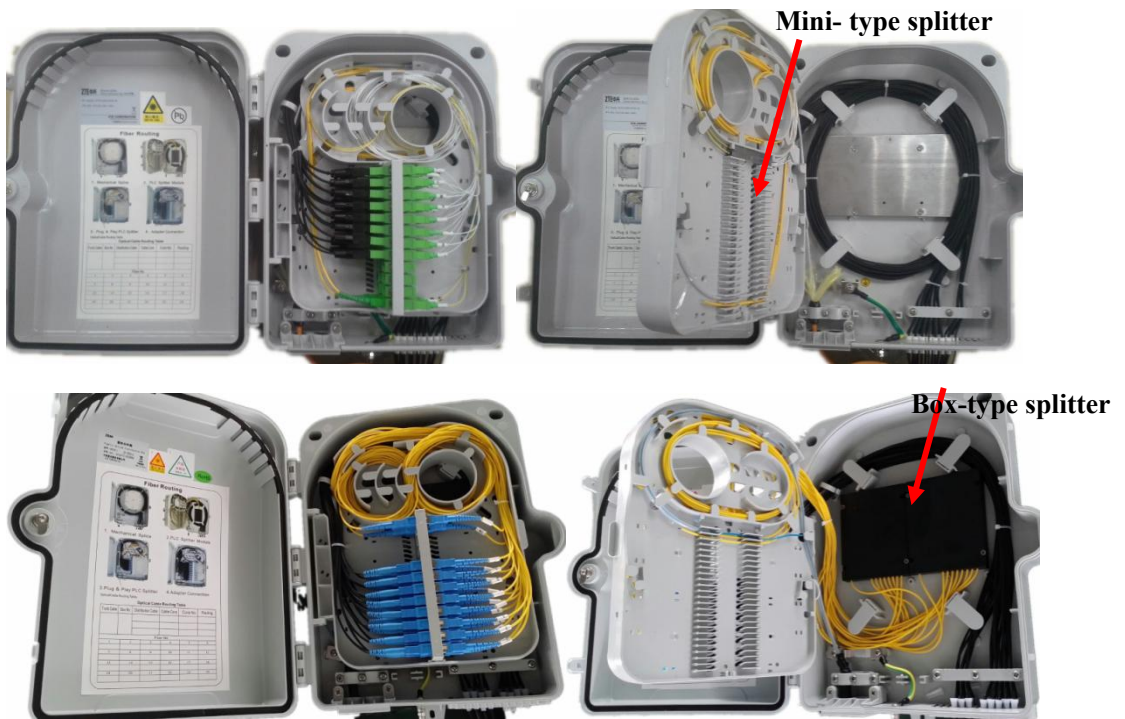


5. Use sealant 2 to block other ports which is not occupied by drop cable.

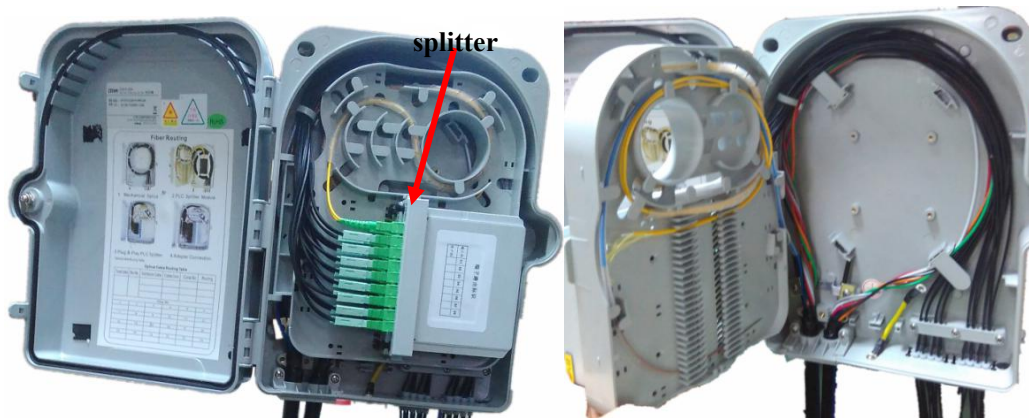


9.1.3 Connecting Optical Cables

P 9.1.3-1 GF378-ODB-GOPBV-2A/ Fiber cable ways



P 9.1.3-2 GF378-ODB-GOPPV-2A Fiber cable ways

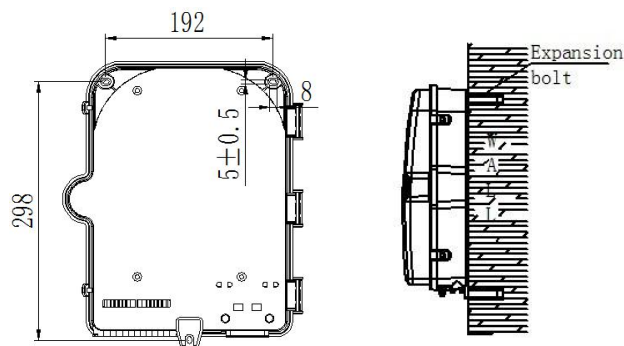


9.2 Install the chassis

9.2.1 Wall-mounted installation

Drill 3 holes over the wall based on the size Figure 5-4, place the expansion bolt, place the box to match up the holes and use bolt to fasten.

Figure 5-4 Wall-mount Installation Diagram



9.2.2 Pole-mounted installation

Fix 1 set of the easy pole ring to the telecom pole

Figure 9-5 Pole-mount Installation Diagram



Note: Pole diameter $\Phi 75$ mm - $\Phi 230$ mm.

9.2.3 Pedestal-mount Installation

Figure 5-6 Pedestal-mount Installation Diagram



10 Order Guide

Name	Model	Dimension (mm) ±3	Capacity	remarks
ODB	GF378-ODB-POPMV-2 A (black)	328*236*98	Max. Splice: 36 cores; Max. Install 2pcs mini type PLC Splitter 1x8 or 1pc 1x16; or 2pcs box type PLC Splitter 1x8 or 1pc 1x16	Indoor or outdoor grounding mounting, wall mounting or pole mounting
ODB	GF378-ODB-POPMV-2 A (grey)	328*236*98		

Appendix: configuration template for ODB

GF378-ODB-POPMV-2A					
No	Name	Model	Unit	Qty	Remark
1	Box body	GF378-ODB-POPMV-2A	pc	1	Grey or black optional
2	Steel hoops	SUS304,Φ75-Φ230		2	accessories
3	Splice protection sleeve		pc	24	accessories
4	Bare fiber protection sleeve		m	1.5	accessories
5	Water-proof cap	XDQAC-SC/PC-A	pc	24	accessories
6	Cable tie	L=125--250	pc	20	accessories
7	Screws		pc	3	accessories
8	Plug-up for screws		pc	3	accessories