

# FAT-I-27 Optical Fiber Distribution Box Installation Manual

Version:1.0

# 1. Description:

FAT-I-27 Fiber Distribution Box is made of high-strength engineering plastics, anti-UV, anti-aging ability. The distribution box is sealed adopts buckle + two screw type structural seals, and the left and right turnover structure of the housing is opened. It is can accommodate 24 SC adapters and three 1:8 blockless splitters or two 1:8 cassette splitters, one 24 cores splicing tray. The max. capacity of 24 cores. The main function of this product is to provide mid-span + branch for various types of branch cables in optical transmission links, and to provide protection functions by splitting and wiring. The output of the wiring terminal using Field Assembly Connector to connect and fixed. The product can be installed outdoor use, it can wall or pole mounting.

Model No.	FAT-I-27	
Dimension( $L \times W \times H$ ) mm	317×268.5×95mm	
	•2 Nos. ports are suitable for $\Phi$ 8-14mm mid-span cable.	
Cable Entries	•2Nos. Φ8-12mm branch cable	
	•24Nos.2*3mm drop cable	
Splicing Tray	1 pcs 24 fiber per tray	
No. of Adapter	Max. 24 pcs SC/APC	
Max. Capacity	24cores	
Material	ABS+PC	
IP rating	IP55	

### 2. Specifications:

## 3. Main points during operation

**3.1**Unscrew the two main mid-span seal plate screws, remove the two mid-span plate, and then remove the mid-span sealing ring. According to the diameter of the installation cable, with a knife in accordance with the following figure from the side of the mid-span sealing ring cut open, The stripped cable put into the sealing ring hole, and put the sealing ring into the mid-span hole, then put two mid-span plate, tighten the mid-span plate screws, the mid-span cable will be sealing. If the cable diameter is not large enough, can also be wrapped around the sealing tape to increase its diameter.



Figure 1

**3.2** Use a screwdriver to unscrew the reinforced core fixing screws, put the reinforced core under the fixed plate, and then fastening screws. Put the main optical cable on the optical cable fixed seat, cover the optical cable and fix the pressure plate, tighten the screws to fix the optical cable. Note: the cable is slightly higher than the hoop around 5-10mm.

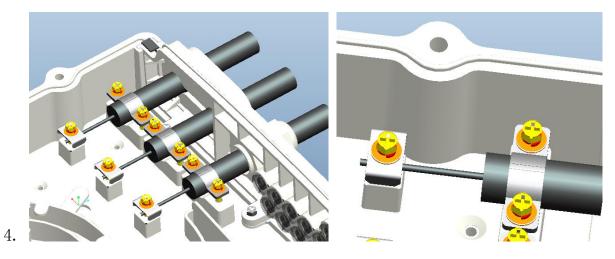


Figure 2

- **4.1** The reservation mid-span fiber, coiled in the bottom of the splice tray holder storage area, put the branch fiber into splice tray, and waiting with the pigtail or input branch cable splice.
- **4.2** Loosen the nut of the PG connector on the hole of the branch cable and insert the branch cable into the hole of the PG connector, tighten the fixing nut of the PG connector. According to the mid-span cable fixed way, fixed the reinforced core and cable fixing seat, the final introduction of the optical fiber into the splicing tray, and in the splicing tray with nylon cable tie fixed, waiting for the splitter input end pigtail or branch fiber for splicing.

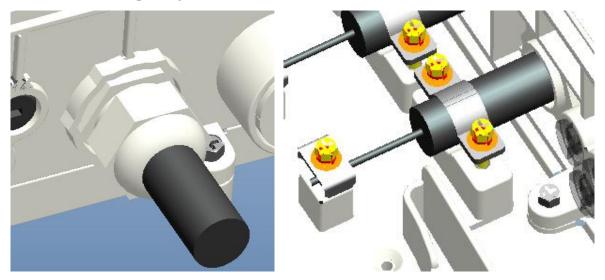
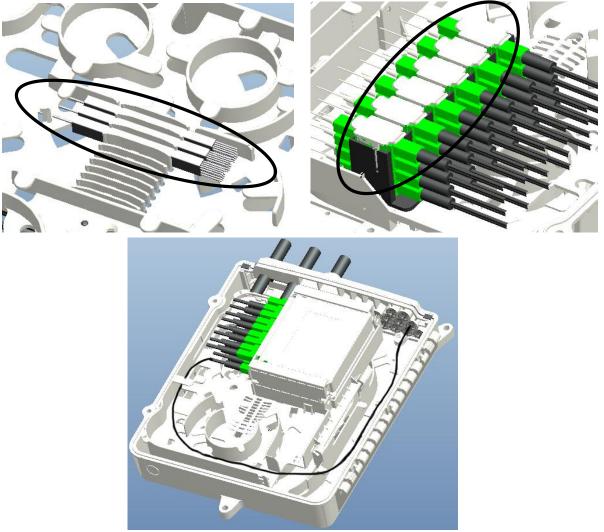


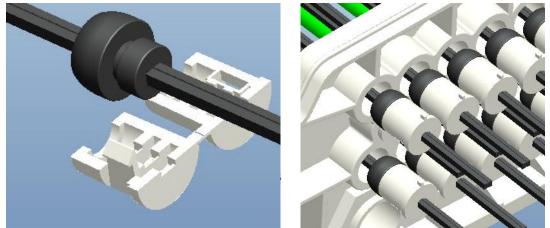
Figure 3

**4.3** The splitter is fixed in the slot of the splice tray holder, the excess fiber is wound in the inner space of the splice tray holder, the output pigtail is inserted into the adapter of the adapter panel, and then the input pigtail is introduced to the splice tray, waiting for the next step with the branch fiber splicing, the basic route is as follows. See Figure 4.





**4.4** Make a Field Assembly Connector in the drop cable, and through drop cable out hole into the distribution box, and then plug in the adapter, forming pathway and optical splitter output fiber. Put the drop cable in the cut sealing ring, and then use the drop cable fixing seat fixed. At last, pressed the drop cable sealing ring into the drop cable hole, can ensure the drop cable fixing and sealing. See Figure 5



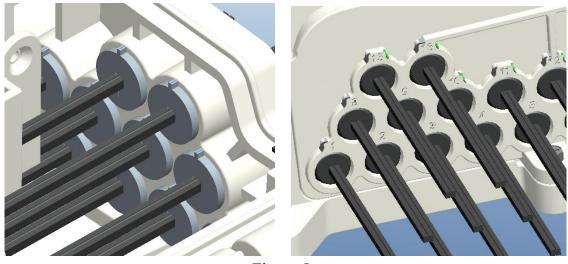
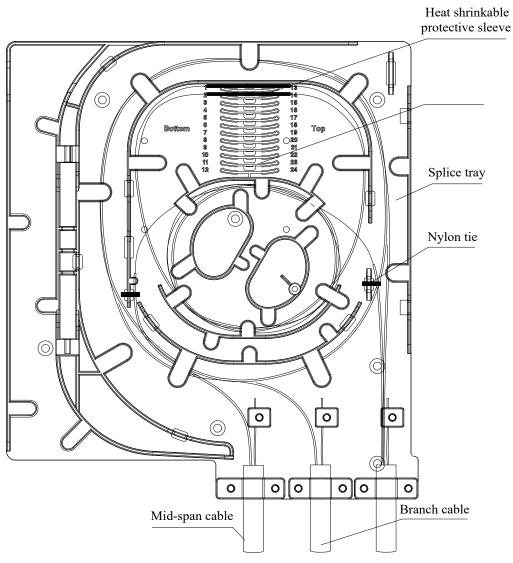


Figure 5

**4.5** Finally, according to the operation requirements of splicing machine, splicing, coiled and fixed on the optical fiber



#### Figure 6

**4.6**After the installation of all optical cables, the fiber route is arranged, the distribution box x cover is covered, and the lock is buckle, the whole distribution box can be completed.

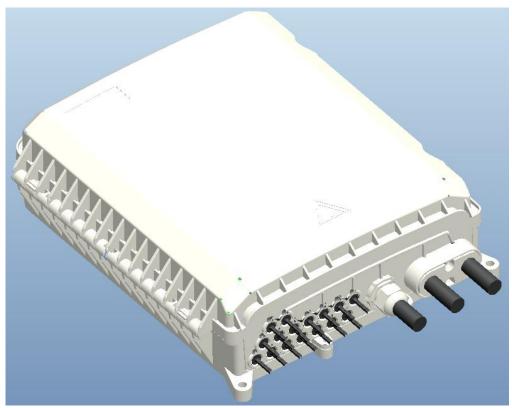
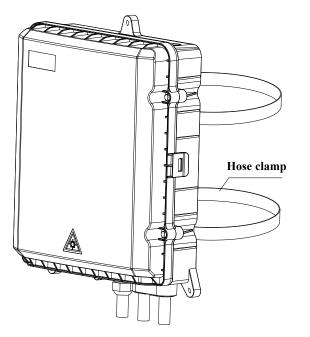
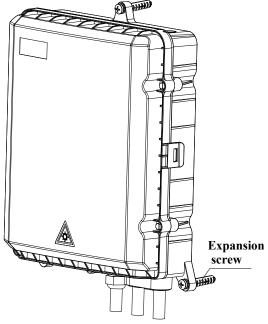


Figure 7

- 4.7 Pole mounting: Use the hose clamp to fix it on the pole. See Figure 8
- **4.8** Wall mounting: Use the expansion screws to fix it on the wall. See Figure 9





# Figure 8

# Figure 9

# 5. List of Accessories

Name	Unit	Quantity	Remark
Heat shrinkable	pcs	Configuration as	
protective sleeve		per capacity	
Nylon tie	pcs	Configuration as	
		per capacity	
Seal tape	pcs	1	
Insulation tape	pcs	1	
buffer tube	m	1	
Plastic inflatable tube	pcs	3	
Bolts	pcs	3	
Hose hoops	pcs	2	According to need matching
Installation Manual	pcs	1	