

## MT-1031 Keyway Type ODF



### I. Overview

Indoor wall-mounted optical fiber distribution box (hereinafter referred to as "fiber distribution box") is mainly used in the wiring connection of indoor optical fiber network such as residential area, building or campus, and indoor optical fiber network such as base station overlay network. Wiring equipment in campuses and other places. The product integrates the functions of optical cable fixing, optical fiber storage and welding, wiring plug interconnection, etc., which can realize the signal interconnection of the main optical cable and the branch optical cable of the district, building or campus.

### 2. Features

- ◆ Integrate the functions of optical cable fixing, optical fiber storage and welding, wiring plug interconnection and so on.
- ◆ A door lock is used to lock the door of the wiring box to ensure the safety of the switch box door of the wiring box.
- ◆ Optical cable compression, reinforcing core and spinning fiber fixing accessories can ensure a good connection between the optical cable and the distribution box, and improve the tensile strength of the optical cable.
- ◆ The card-mounted adapter mounting plate facilitates the installation between the adapter mounting plate and the partition.



### 3. Main technical indicators

- ◆ Environmental temperature:  $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$
- ◆ Relative humidity:  $<85\%$  (at  $30^{\circ}\text{C}$ )
- ◆ Atmospheric pressure:  $70 \sim 106\text{KPa}$
- ◆ Working wavelength:  $850\mu\text{m}$ ,  $1310\mu\text{m}$ ,  $1550\mu\text{m}$  (depending on the use of optical fiber)
- ◆ Connector insertion loss:  $\leq 0.3\text{dB}$  (connection loss:  $\leq 0.5\text{dB}$ )
- ◆ Connector return loss:  $\geq 45\text{dB}$  (PC),  $\geq 50\text{dB}$  (UPC),  $\geq 60\text{dB}$  (APC)
- ◆ Connecting plug life: 500 times
- ◆ Insulation resistance between the chassis and the grounding device:  $\geq 1000\text{M}\Omega/500\text{V}$  (DC)
- ◆ Withstand voltage between the chassis and the ground:  $3000\text{V}$  (DC)/1min (no breakdown, no arcing).

### 4. Specifications and capacity

- ◆ Box size:
- 36 core :  $430\text{mm(L)} \times 240\text{mm(W)} \times 140\text{mm(H)}$  5KG
- 48 core :  $430\text{mm(L)} \times 240\text{mm(W)} \times 140\text{mm(H)}$  5.5KG
- 72 core :  $430\text{mm(L)} \times 240\text{mm(W)} \times 180\text{mm(H)}$  6KG

### 5. Operating instructions

#### 5.1 Fixing the main optical cable

Pass the main optical cable into the optical cable through hole on the side of the splice tray in the distribution box, strip the main optical cable about 0.8m long (the length can be according to actual needs), fix the main optical cable slightly with the pressure plate, and fix the excess spun fiber and the reinforcing core Cut it off, and fix the spun fiber and reinforcing core in the optical cable with a compression column.

Note: Ensure that there is a long enough optical cable outside when the wiring box is fixed.

#### 5.2 Stripping

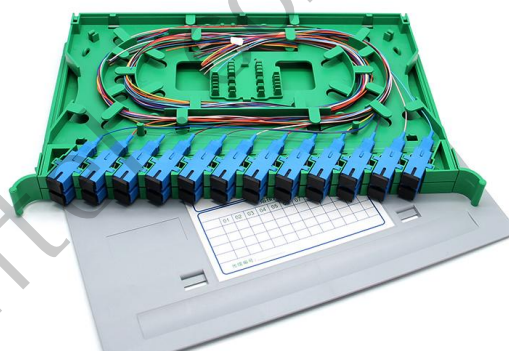
Peel the outer skin of the pigtail fiber and cut off the excess spun fiber; coil the tight-buffered fiber of the main optical cable clockwise (or reverse) clockwise to the routing ring, and wait for the fusion of the tight-buffered fiber in the main optical cable and the pigtail.

Note: The optical fiber/optical cable beside the splice tray can be bundled lightly with a lashing line, etc.

### 5.3 Fiber splicing and coiling

Thread the optical fiber fusion splicing heat shrinkable tube onto the tightly-buffered fiber of the main optical cable, strip the tightly-buffered fiber of the main fiber cable and the tight-buffered fiber of the pigtail with a fiber stripper respectively, clean the fiber, and cut the end face of the fiber flat with a fiber cleaver , Put the two stripped optical fibers on both sides of the fusion splicer for fusion splicing. After the optical fibers are spliced, put the optical fiber fusion splicing heat shrinkable tube into the optical fiber fusion splicing zone, and put the splicing zone to the heating zone of the fusion splicer for heat shrinking Fusion splicing sleeve, after the splicing sleeve is connected to the tightly-buffered optical fibers at both ends, put the fused splice point on the splice point fixing clamp in the splice tray, and the excess optical fiber is coiled into the splice box. The pigtail and the main cable tightly sleeve the optical fiber Come out of the splice box naturally.

The fusion splicing of other optical fibers is the same as above.



### 5.4 Fiber optic fixation

Tie patch cord lightly at the upper end of the splice box outlet, and lightly tie the optical fibers on both sides of the splice box together with nylon cable ties.

### 5.5 Wiring plug connection

Pass the wiring optical cable assembly through the lead-in hole on the side of the sub-box of the wiring box without the splice tray, fix the wiring optical cable at the fixing seat of the wiring optical cable, and connect the plug on the wiring optical cable assembly to the corresponding adapter interface on the partition Connect, so that the corresponding optical path is connected. The connection method of other plugs is the same as above.

### 5.6 Wall punching

After all the optical fiber distribution boxes are connected, select the wall-mounted position of the distribution box, punch holes on the wall according to the wall-mounted position of the distribution box, and insert the provided expansion bolts (remove the flat washers, spring washers and nuts);

### 5.7 Hanging box fixing

Hang the wiring box on the expansion bolts, put flat washers and spring washers on the bolts, and then tighten the nuts on the expansion bolts to fix the wiring box on the wall.

Product Type: (12 cores, 24 cores, 36 cores, 48 cores, 72 cores) ODF unit box

Specification: 19 "standard installation

Material: The shell is made of cold-rolled board with a thickness of 1.0mm, epoxy electrostatic spray, beautiful appearance, easy to use. Color: gray;

## 6. Conditions of Use

- \*Working temperature:  $-10^{\circ}\text{C}\sim+40^{\circ}\text{C}$
  - \*Storage temperature:  $-25^{\circ}\text{C}\sim+55^{\circ}\text{C}$
  - \*Relative humidity:  $\leq 85\%$  ( $+30^{\circ}\text{C}$ )
  - \*Atmospheric pressure:  $70\text{Kpa}\sim 106\text{Kpa}$
- Photoelectric performance
- \*Nominal working wavelength: 850nm, 1310nm, 1550nm
  - \*Insertion loss:  $\leq 0.5\text{dB}$
  - \*Return loss:  $\text{PC}\geq 40\text{dB}$ ,  $\text{UPC}\geq 50\text{dB}$ ,  $\text{APC}\geq 60\text{dB}$
  - \*Dielectric strength:  $\geq 3\text{KV}(\text{DC})/1\text{min}$ , no breakdown, no arcing;
  - \*Insulation resistance:  $\geq 1000\text{M}\Omega/500\text{V}(\text{DC})$
  - \*Life:  $\geq 1000$  times
  - \*Bending radius of optical fiber of receiving disk:  $\geq 40\text{mm}$



## 7. Mechanical behavior

- \*The combustion performance of plastic parts meets the requirements of GB51697-85.
- \*The optical fiber of the optical cable passes through the metal plate hole and is equipped with a protective cover, and the radius of curvature of the core and pigtail is greater than 37.5mm
- \*The optical cable enters the chassis, and the radius of curvature is greater than 15 times the diameter of the optical cable
- \*The shell is made of cold-rolled board with a thickness of 1.5mm, epoxy electrostatic spray, beautiful appearance, easy to use.

## 8. Features

- \*With optical cable fixing and protection function
- \*With optical cable termination function
- \*Tuning function
- \*Protection function of optical cable core and pigtail

## 9. Scope of application

- \*Suitable for small and medium distribution systems of fiber to the cell, fiber to the building, remote module office and wireless base station