HUAWEI eKit

F600C-30-1GH

Quick Start

Issue 02

Date 2023-11-09

HUAWEI TECHNOLOGIES CO., LTD.

HUAWEI

Trademarks and Permissions


and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.
All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: https://ekit.huawei.com

Contents

1 Device Appearance

NOTE

The appearances shown in this document may differ from the actual appearances of the products. The actual products prevail.

Port/Button	Silkscreen	Description
Reset button	Reset	• Restarts the device if you press the button. • Restores the factory settings and restarts the device if you press and hold the button for more than 10s. **NOTE** Exercise caution when pressing the reset button. After the device is restored to its factory settings, Internet access may be unavailable. If so, contact the service provider.
Upstream optical port	GPON/PoF	Connects to a power over fiber (PoF) cable and supports GPON upstream transmission.
Downstream GE port	LAN/WAN/PoE	Connects to a wired Ethernet cable to provide 10/100/1000 Mbit/s access and supports GE upstream transmission.
Power supply	POWER	Connects to the power adapter.

NOTE

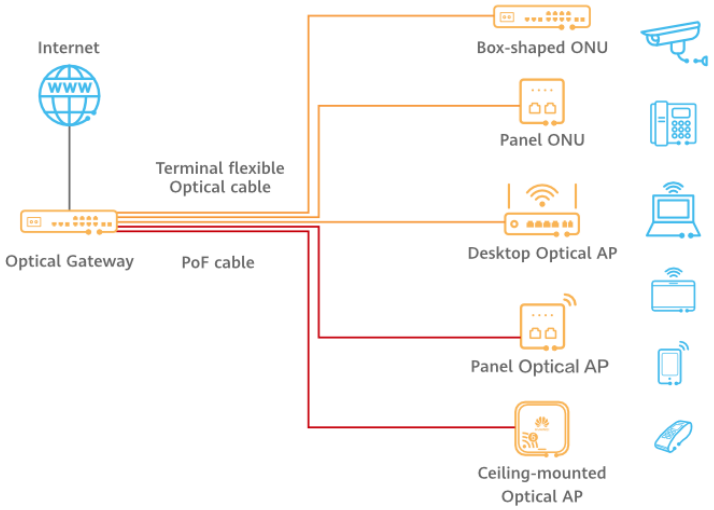
Use a power adapter that complies with related safety standards or has passed the China Compulsory Certification (CCC). Otherwise, the device may be damaged.

2 Technical Specifications

Item	Specification
Dimensions (W x D x H)	200 mm x 200 mm x 38 mm
Weight (without a power adapter)	About 0.6 kg
Power supply of the entire system	56 V DC, 0.3 A (PoF* power supply) 12 V DC, 1.5 A (power supply through an adapter, non-standard configuration)
Operating temperature	–10°C to +50°C
Operating humidity	5% RH to 95% RH, non-condensing

3 Typical Application

Figure 3-1 MiniFTTO networking scenario



4 Device Installation

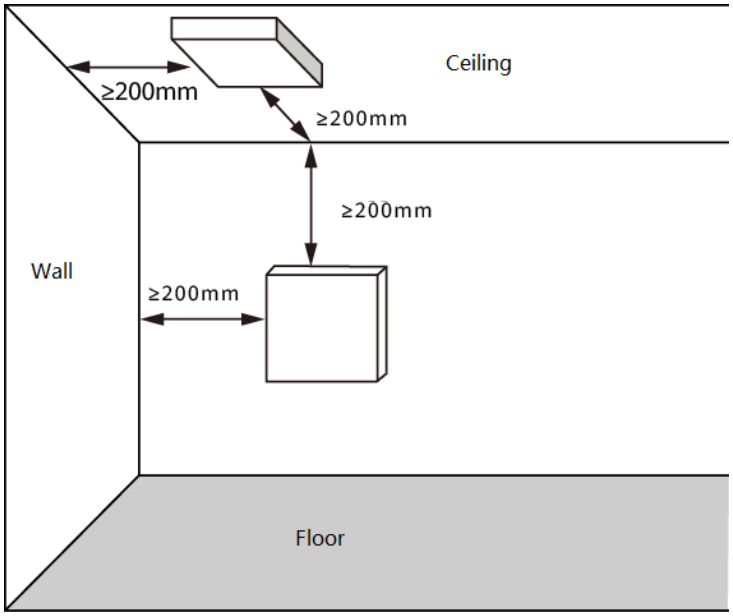
NOTE

- Installation personnel need to manually record the MAC addresses and deployment positions of devices for commissioning engineers to configure.
- You can scan the QR code on the back of the device to obtain the quick start guide.

Determining the Installation Position

Generally, the device is installed on a wall or ceiling using a mounting bracket. The installation position is determined by the site survey. At least 200 mm clearance must be reserved between the cable outlet of the device and the wall. **Figure 4-1** shows the installation clearance requirements.

Figure 4-1 Installation reference diagram



When determining the installation position, comply with the following rules:

- Minimize the number of obstacles (such as walls) between the device and STAs.

- Install the device on the ceiling (recommended, the ceiling height does not exceed 5 m) or on a wall (about 3 m above the floor).
- Keep the device away from electronic devices that may cause radio interference, such as microwave ovens, APs, and antennas. For details, see **Table 4-1**.
- Keep the installation position concealed to avoid disturbing daily work and life.
- Install the device at a site that is free from leaking or dripping water, heavy dew, and humidity, and take protective measures to prevent water from flowing into the device along the cable.
- Do not install the device in an environment with high temperature, dust, poisonous gases, flammable or explosive objects, electromagnetic interference (from a radar station, radio station, or substation), unstable voltage, violent shakes, or strong noise.

Table 4-1 General requirements for antenna anti-interference deployment distance

Scenario	Deployment Distance Requirement
Indoor installation	• Distance between antennas: > 7 m • Distance from 4G antennas of an operator: > 5 m • Far away from other electronic devices (such as microwave ovens) that may cause antenna interference

NOTE

For a device with built-in antennas, the deployment distance requirement for the device is the same as that for the antennas.

Installing the Device on a Ceiling/Wall

The methods for ceiling-mounted and wall-mounted installation are the same. Ceiling-mounted installation is recommended.

NOTE

A wall for installing the device needs to meet the following requirements:

- The wall can bear the weight of four times the total weight of the device and mounting bracket without damage. When the total weight of the device and mounting bracket is less than 1.25 kg, the load-bearing capability of the wall must be greater than or equal to 50 N.
- When the tightening torque of a screw reaches 3.5 N·m, the screw still properly works, without crack or damage on the wall.

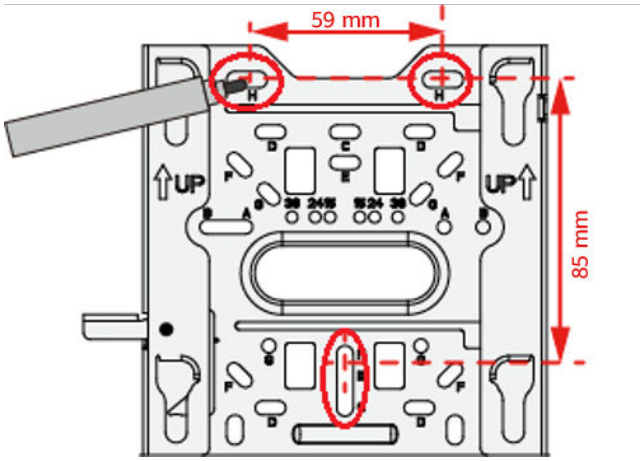
Mounting brackets and expansion screws are required to install the device on the ceiling. The procedure is as follows:

NOTE

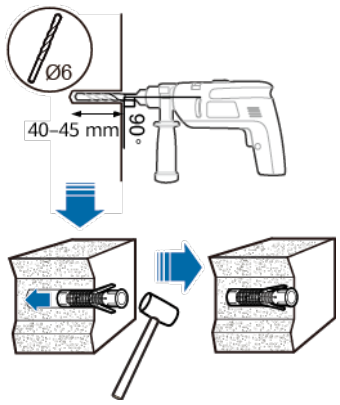
When fixing the mounting bracket, ensure that the arrows of 

point upwards.

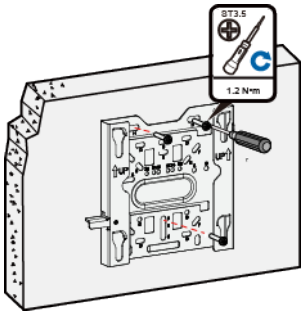
1. Attach the mounting bracket against the wall and adjust its position properly. Mark positions of the mounting holes with a marker, as shown in the following figure.



2. Use a 6 mm drill bit to drill 40 mm to 45 mm deep holes in the marked positions. Hammer the expansion tubes into the holes until the expansion tubes are flush with the wall.



3. Attach the mounting bracket against the wall, and use the Phillips screwdriver to fasten three expansion screws into the expansion tubes to secure the mounting bracket to the wall.



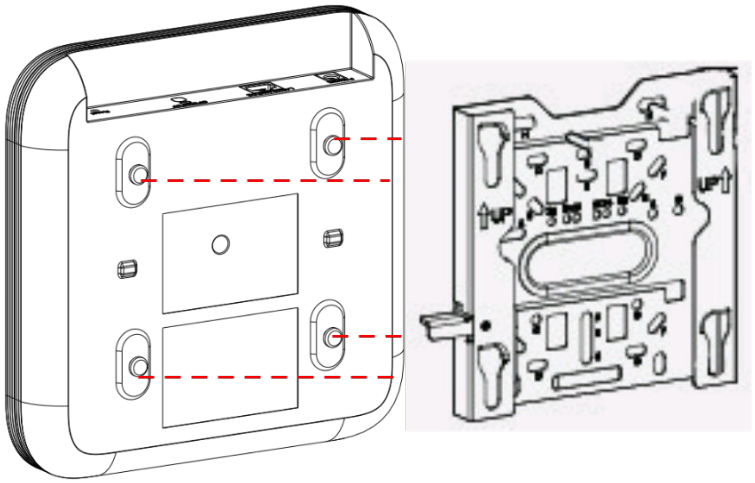
4. Connect and arrange cables. For details, see **6 Cable Connection**. To route cables through the ceiling, refer to **Figure 4-2**.

Figure 4-2 Cable connection of F600C-30-1GH

NOTICE

When connecting a PoF cable to the F600C-30-1GH, ensure that the bending radius of the cable is greater than or equal to 24 mm.

5. Align the rubber feet at the rear of the device with the installation holes on the mounting bracket, and fasten the device as shown in the following figure. When you hear a click, the device is secured to the lock position.

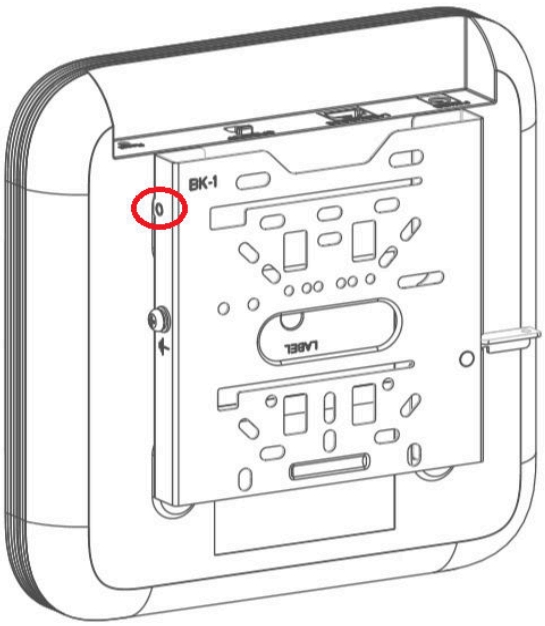


NOTE

After the device is installed, ensure that the ejector lever is in position to prevent the device from falling off. Ensure that the installation space meets the specified requirements to facilitate future maintenance.

If the device is installed in a scenario with strong vibration, use M3x12 screws to secure the device to the mounting bracket to prevent the device from falling off due to vibration. In normal scenarios, you do not need to install these screws.

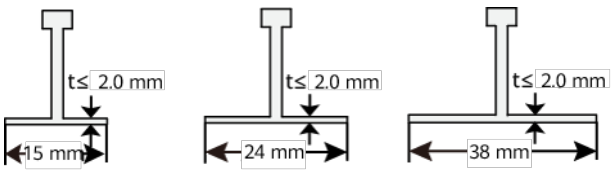
Figure 4-3 Fixing the device using screws



Installing the Device on an Indoor T-rail

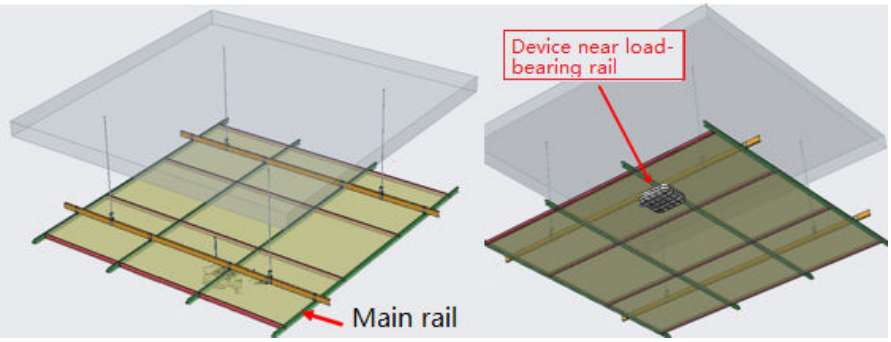
The T-rail can bear the weight of four times the total weight of the device and mounting bracket without damage. When the total weight of the device and mounting bracket is less than 1.25 kg, the load-bearing capability of the T-rail must be greater than or equal to 50 N.

1. Determine the T-rail model. The following figure shows the specifications of a T-rail supported by a mounting bracket. The following uses a flat-edge T-rail of 24 mm as an example.

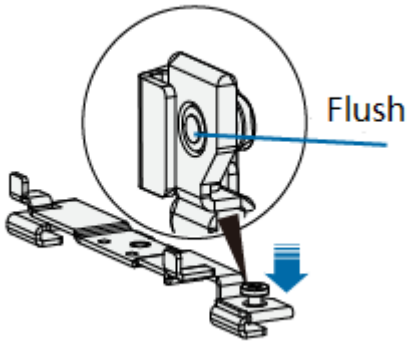


NOTE

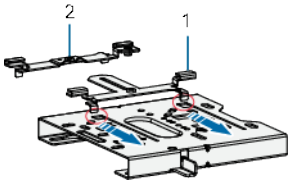
The mounting brackets must be installed on the main rail.



2. Partially tighten the M3x6.2 set screw to the T-rail brackets.

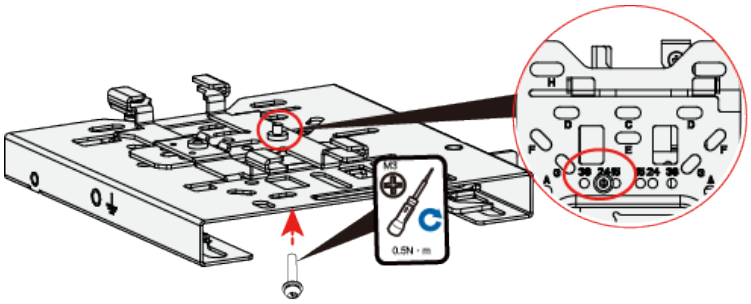


3. Install the flat-edge T-rail mounting brackets a and b along the sliding slot on the mounting bracket body in the sequence shown in the following figure.

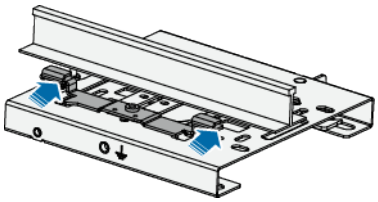


1. Flat-edge T-rail mounting bracket a	2. Flat-edge T-rail mounting bracket b

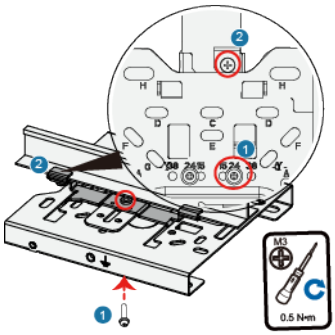
4. Secure the M3x8 screw through hole 24 marked in the figure, and secure T-rail bracket a. The T-rails of 15 mm and 38 mm correspond to holes 15 and 38 on the mounting brackets, respectively.



5. Insert mounting bracket a into the T-rail, and slide mounting bracket b along the slot until the T-rail is tightened.



6. Secure the M3x8 screw through hole 24 marked in the following figure, and secure T-rail mounting bracket b. Tighten the M3x6.2 set screw for installing the T-rail mounting bracket.



NOTE

After the set screw is tightened, the mounting brackets may be deformed. This is normal and does not affect the device installation.

7. Connect and arrange cables. For details, see **6 Cable Connection**. To route cables through the ceiling, refer to **Figure 4-4**.

Figure 4-4 Cable connection of F600C-30-1GH

NOTICE

When connecting a PoF cable to the F600C-30-1GH, ensure that the bending radius of the cable is greater than or equal to 24 mm.

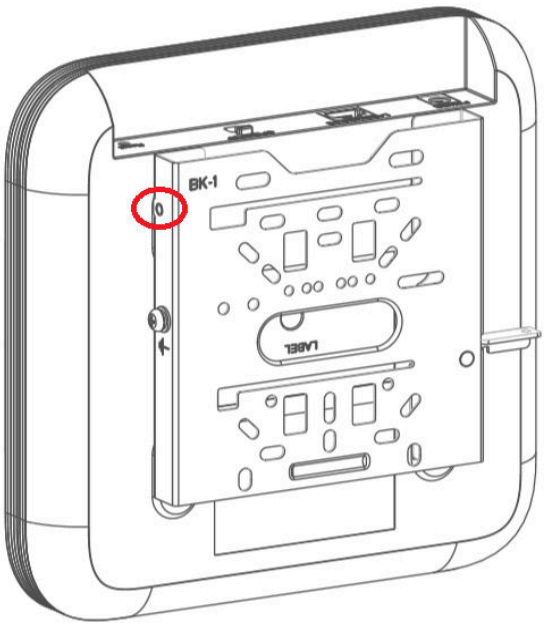
8. Align the rubber feet of the device over the mounting slots on the mounting bracket and vertically push the device. Then press the device downwards to secure it. When you hear a click, the device is secured to the mounting bracket. For details, see **5** in **Installing the Device on a Ceiling/Wall**.

NOTE

After the device is installed, ensure that the ejector lever is in position to prevent the device from falling off. Ensure that the installation space meets the specified requirements to facilitate future maintenance.

If the device is installed in a scenario with strong vibration, use M3x12 screws to secure the device to the mounting bracket to prevent the device from falling off due to vibration. In normal scenarios, you do not need to install these screws.

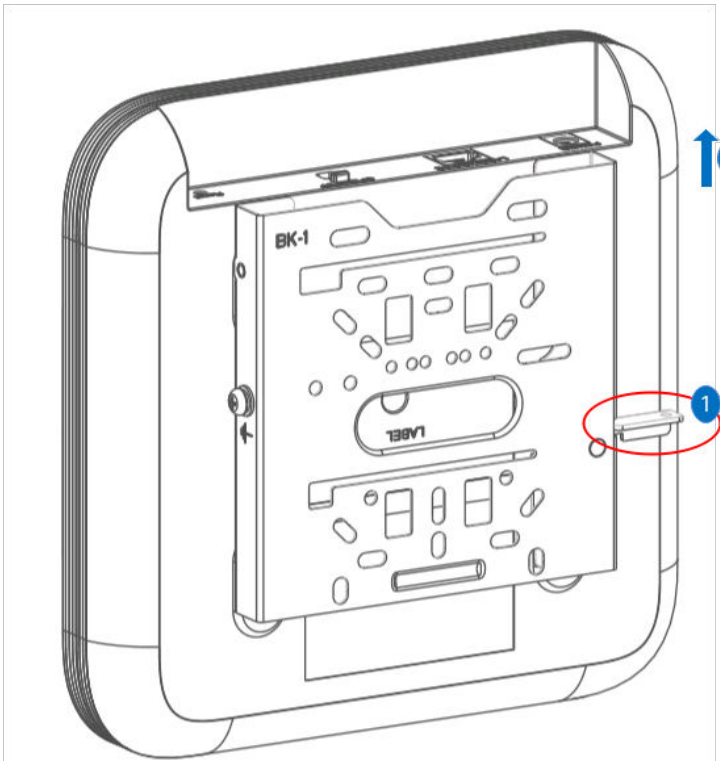
Figure 4-5 Fixing device using screws



5 Device Removal

When removing the device, place both hands on both sides of the device. Hold the device with one hand and press the ejector lever on the mounting bracket with the other hand to unlock the device. Slide the device in the reverse direction to unlock it.

Figure 5-1 Removing the device



NOTE

If screws are installed, remove the screws and then follow the preceding steps to remove the device.

6 Cable Connection

Figure 6-1 Cable connection

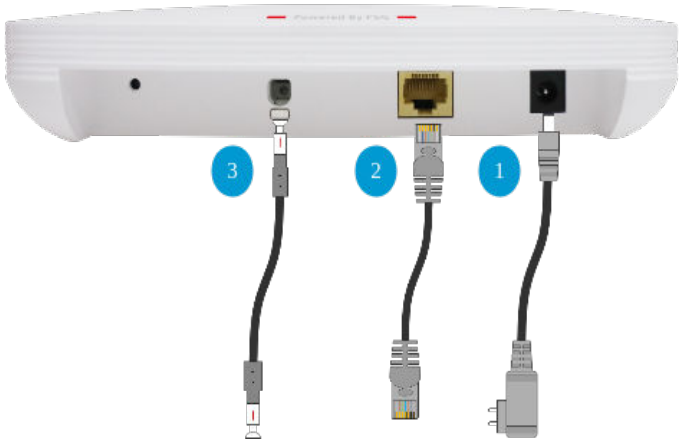


Table 6-1 Cable connection

No.	Port	Description
1	Power port	When the device uses the DC power supply, use a power adapter for power supply; otherwise, the device may be damaged.
2	Downstream GE port	When the GE port is used as a user-side port, connect it to a PC using an Ethernet cable. When the GE port is used for GE upstream transmission, connect it to the upstream device using an Ethernet cable.
3	Upstream optical port	This port is an XC/UPC port, which is connected to a PoF cable for GPON upstream transmission.

NOTE

The F600C-30-1GH can be powered in either of the following modes:

- Connecting to a PoF cable: Use the PoF cable for data transmission and power supply.
- Connecting to a power cable and a PoF cable: Use the power cable for power supply and use the PoF cable for data transmission. Convert the upstream XC/UPC terminal to the SC/UPC terminal and connect it to the corresponding optical port.

When connecting a PoF cable, refer to **Figure 6-2**. To remove a PoF cable, press the button as shown in **Figure 6-3** and remove the PoF cable.

NOTE

For details about the restrictions on the power supply distance of a PoF cable, see the corresponding cable description.

When connecting a PoF cable, ensure that the cable is inserted in the correct direction. Do not frequently insert and remove the cable.

The PoF output voltage is 56 V. Exercise caution when using the device.

Figure 6-2 Connecting a PoF cable

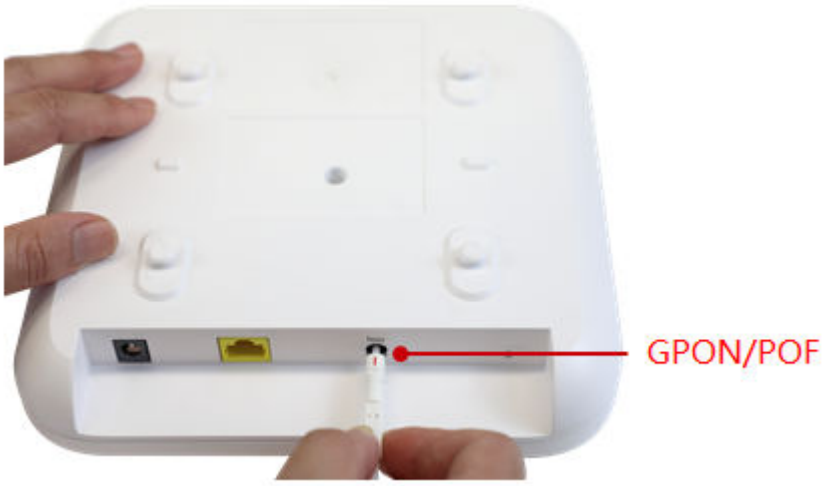


Figure 6-3 Removing a PoF cable

Pay attention to the following points when bundling the cables:

- Different types of cables must be separately routed with the minimum spacing of 30 mm and cannot be entangled or crossed. Cables should be parallel or separated using dedicated separators.
- The cables must be bound tightly and neatly, and the cable sheaths must be intact.
- Cable ties must be bound neatly facing the same direction, and those at the same horizontal line must be in a straight line. Cable tie tails should be cut smoothly and evenly.
- After cable installation, labels or nameplates must be attached to the cables.

7 Indicator Description

Indicator Color	Status	Description
Yellow	Steady on	The device is being initialized.
	Blinking (once every 1s)	The receive optical power is lower than the optical receiver sensitivity. **NOTE** When the F600C-30-1GH is connected upstream through an optical fiber and a fiber cut occurs, the device blinks yellow.
	Blinking (once every 2s)	The receive optical power is normal but the PON port is not registered and not online.
Red	Steady red	The system startup is abnormal (non-Wi-Fi exception).
	Blinking (once every 1s)	The Wi-Fi startup is abnormal.
	Blinking (once every 2s)	The Optical AP is a rogue Optical AP. **NOTE** Description of a rogue Optical AP: 1. A faulty Optical AP whose laser generator is faulty and out of control 2. An unauthorized Optical AP in continuous or irregular mode
Green	Steady on	The device has been started and registered, and is working properly.
	Blinking (once every 1s)	The device is updating the program.

NOTE

If the indicator is off, the device is not powered on or the LED indicator is turned off.

8 FAQs

How Do I Log In to the WebUI of an Optical AP in a MiniFTTO Network?

NOTE

The actual WebUI may be different from the description. The actual WebUI prevails.

Method 1:

After an Optical AP is connected to a MiniFTTO network, an IP address is automatically allocated to the Optical AP. You can use this IP address to access the Optical AP.

NOTE

You can obtain the IP address in either of the following ways:

- Log in to the WebUI of the gateway OLT and choose **System Information > User Device Information** to view the IP address of an Optical AP.
- Check on eSight. The login password is the same as the common user password of the primary gateway.

Method 2:

Log in to the WebUI of the primary gateway, choose **System Information > Network Information**, and click **Click to Login** under the Optical AP icon. The Optical AP WebUI is displayed.

How Do I Configure Optical AP Network Settings in a MiniFTTO Network?

After an Optical AP is connected to a MiniFTTO network, the network settings of the primary gateway are synchronized to the Optical AP. Therefore, no Optical AP configuration is required.

How Do I Change the Wi-Fi Name and Password of an Optical AP in a MiniFTTO Network?

For the MiniFTTO networking solution, you are advised to change the Wi-Fi name and password on the primary gateway. The Optical AP automatically synchronizes the changes.

How Do I Restart the Device?

Press the reset button using a needle-type object to restart the device. For details about the position of the reset button, see **1 Device Appearance**.

How Do I Restore Factory Settings?

Use a needle-type object to press and hold the reset button for more than 10 seconds to restore factory settings and restart the device. For details about the position of the reset button, see **1 Device Appearance**. If the indicator is off and then is on, the device is restored to its factory settings.

