

EchoLife EG8020P

快速入门

EchoLife EG8020P

Quick Start



# 1. 注意事项

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## 安全注意事项：

- 设备属于一类激光产品，请勿直视设备上的光纤接口，以免视力受损。
- 请勿让儿童玩耍设备及小配件，避免因吞咽等行为产生危险。
- 请严格按照厂商要求安装设备（仅支持安装在 86 型电工盒和尺寸为 110mm x 125mm x 30mm 的标准电工盒内），在设备四周和顶部留出 10cm 以上的散热空间，勿将设备靠近热源或水源，并远离具有强磁场或强电场的电器，如微波炉、电冰箱、手机。
- 设备供电电压必须满足设备的输入电压要求。
- 禁止使用非标配的电源适配器，以免影响设备正常使用或引入安全风险。
- 插拔设备线缆时，请保持双手干燥，并应先停止使用设备，断开电源。
- 严禁将光纤加强芯及其他金属部分引入室内，以免雷雨天造成设备损坏或人身伤害。
- 雷电天气请断开设备电源，并拔出连接在设备上的所有线缆，如电源线、网线等，以免设备遭雷击损坏。

- 严禁将网线、电源适配器及其线缆连接到室外，以免雷雨天造成设备损坏或人身伤害。
- 请勿在设备上放置任何物体，以免因设备过热或挤压变形而损坏。
- 请防止异物（如金属）通过散热孔进入设备，防止水或其他液体流进设备。如有不正常现象出现，如液体意外流入设备、设备冒烟、声音异常、有异味等，请立刻停止使用并断开电源，拔出连接在设备上的所有线缆，如电源线、光纤和网线等，设备发生故障时请联系指定的维修点。
- 请勿自行拆卸设备，设备发生故障时请联系指定的维修点。
- 请遵守相关设备包装材料、耗尽电池和废旧设备处理的本地法令，并支持回收行动。
- 未经授权，任何单位和个人不得对设备进行结构、安全和性能设计方面的改动。
- 请遵从 IEC 60825-1 标准(200703 第 2 版)规定的程序进行控制、调整或操作，否则可能导致辐射伤害。

## **防火注意事项：**

- 设备需要远离大型热源、裸露的火源、及大功率设备，如电暖器、蜡烛、电吹风等，避免引入安全风险。

- 设备供电线路上或者设备附近，如有老化的电缆或者老化的插线板等设施，请及时更换，避免引入安全风险。

## 2. 外观介绍

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由于 EG8020P 产品需与华为配套适配器使用，所以此章节除了介绍 EG8020P，也会简单介绍电源适配器。

EG8020P 可适配 86 型电工盒和尺寸为 110mm x 125mm x 30mm 的标准电工盒，为了适配这些盒子，产品会配置不同的产品外壳和固定板，具体外壳和固定板差异详见下文。由于二者功能和安装类似，全文仅以适配 86 型电工盒的产品为主进行讲解。

EG8020P 与电源适配器整体如下图所示：

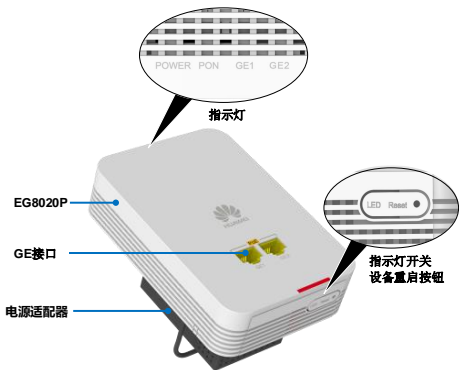
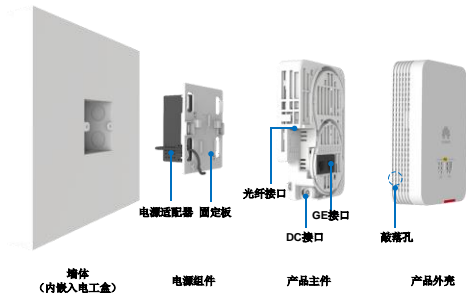


表 2-1 按钮及指示灯说明

序号	按钮及指示灯	说明
1	LED	指示灯开关按钮，用户可通过此按钮开启或关闭设备所有指示灯。
2	Reset	设备重启按钮，详见常见问题。

序号	按钮及指示灯	说明
3	POWER/PON/ GE1/GE2	详见指示灯说明。

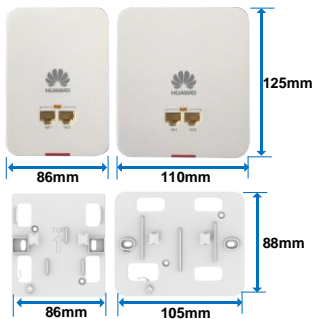
分解设备如下图所示：



## 说明

- 文档中所有示意图与产品实物可能有所差别，这些差别不会影响产品功能，请您放心使用。
- 敲落孔：外壳上预留的开孔，孔边缘已经被切断而仅留一些粘连，需要开孔时只需钳子之类将粘连部分敲断，就可以得到完整的开孔以供线缆穿入。
- 图中各接口描述详见连接线缆。

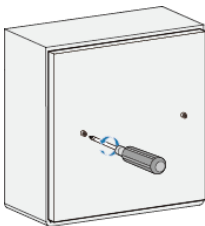
为了适配上述电工盒，产品配置了不同的产品外壳和固定板，具体外壳和固定板差异如下所示，其中左侧适配 86 型电工盒，右侧适配 110mm x 125mm x 30mm 的标准电工盒。



### 3. 安装 EG8020P

EG8020P 可以简单快速的安装在 86 型电工盒上，具体安装步骤如下：

**Step 1** 用螺丝刀取下墙壁上86盒的面板（如果没有面板则忽略此步骤）。



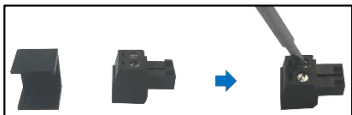
**Step 2** 制作电源端子：

1. 将电源线接入冷压端子，冷压端子支持 $1.0\text{mm}^2$ 的线缆。



2. 取下电源端子的保护套，用一字螺丝刀拧松端子上的螺钉。

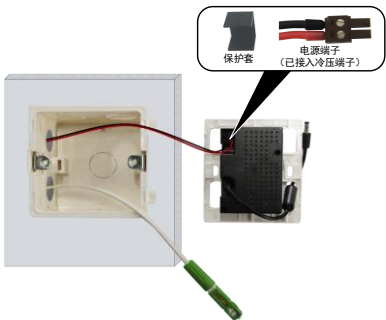




### 说明

电源端子支持剥线后直径为 0.25mm~1.3mm 的线缆。

3. 将接入电源线的冷压端子插入电源端子孔内，然后拧紧螺钉，装上保护套，并将电源端子插入电源口。

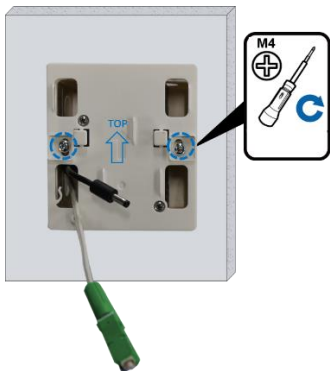


### 说明

电源线插入端子时不用区分正负极。

**Step 3** 将电源连接头和光纤从电源适配器固定板

的左下角孔引出，然后将电源适配器安装到86盒上，并用螺钉（M4 x 30）固定。



#### 说明

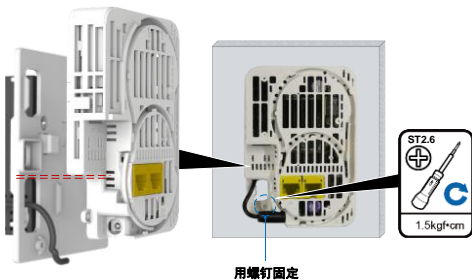
- 固定板安装时尽量保证面板平整，避免安装力矩过大导致固定板变形而影响产品安装。
- 安装在 110mm x 125mm x 30mm 的标准电工盒上时，需使用配套的 ST3.5 x 40 螺钉。



## 注意

- 固定板务必按 TOP 指示方向安装。
- 固定电源适配器时，注意不要压住光纤。
- 若光纤需要从 86 盒外侧进入产品内，则不需要穿过固定板。为了防止压着光纤，产品外壳需要敲掉敲落孔，详见步骤 7。

**Step 4** 取下EG8020P的外壳，然后将其主件挂到适配器固定板上，并用螺钉（ST2.6 x 6）固定。

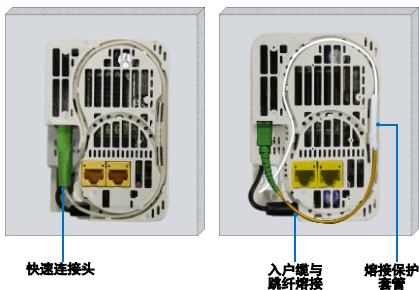


## 说明

将产品挂到固定板上时，可先将如图中的端面（水平红线）对齐，然后将产品向下滑动即可锁住。

**Step 5** 将入户缆成端：可通过冷接（如制作快速连接头）或热熔（如与跳纤熔接）的方式制作光纤连接头。

**Step 6** 将电源适配器的连接头插入EG8020P的电源口，将光纤按照如下路由示意图盘绕，用户安装时请根据实际情况进行调整。

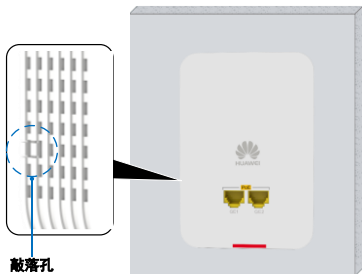


## 说明

- 光纤盘绕一大圈约 295mm，一小圈约 190mm。
- 为保证光纤正常使用，在插入连接头前，建议光纤引出到槽外后再插入，如下图所示：



**Step 7** 确保所有光纤都在槽内后，然后盖上外壳。若光纤从86盒外引入，则需要敲掉外壳左下侧的敲落孔。





注意

安装外壳前请检查盘好的光纤，确保无翘起，避免外壳挤压到光纤。

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## 4. 连接线缆

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连接线缆关系说明如下图所示：

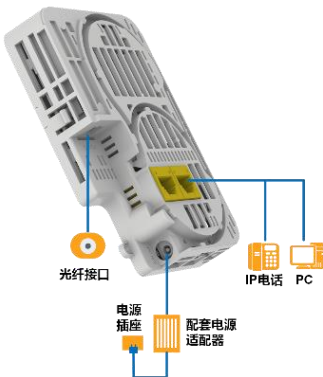


表 4-1 接口说明

序号	接口	说明
1	光纤接口	GPON, SC/APC; 若用户使用 SC/UPC 的接口, 请自备 APC 转 UPC 的跳纤进行转换。
2	DC 电源接口	请使用华为配套电源适配器供电, 否则可能将造成设备损坏。
3	GE 接口	业务 LAN 口, 用于连接以太网, 并支持 PoE 供电。可连接 IP 电话、PC 等设备。

## 5. 登录 Web 界面

请按下面步骤登录 EG8020P 的 Web 界面

**Step 1** 设置个人计算机的 IP 地址与 EG8020P 的管理 IP 地址在同一网段。例如:

IP 地址: 192.168.18.10

子网掩码: 255.255.255.0



说明

EG8020P 管理 IP 地址和子网掩码的出厂缺省值为:

IP 地址: 192.168.18.1

子网掩码：255.255.255.0

**Step 2** 在浏览器地址栏输入EG8020P的管理IP地址，然后按回车键，浏览器弹出登录窗口。

**Step 3** 在登录窗口中输入用户名和密码（用户名为**Epuser**，出厂默认密码为**userEp**），选择Web界面语言，然后单击Login。密码验证通过后，即可访问Web界面。



### 说明

- 若您使用的IE浏览器版本为IE 8.0或更低版本，为确保正常登录Web界面，建议您升级IE浏览器到IE 11.0或更高的版本。
- 登录Web界面后，如果5分钟之内未执行任何操作，超时退出，系统自动返回登录状态。
- 连续三次用户名和密码输入错误，系统被锁定，一分钟后自动解锁。
- 使用初始用户名和密码登录Web界面后，请及时修改登录密码。



## 6. 指示灯说明

表 6-1 指示灯状态说明一

指示灯	状态	说明
POWER	绿灯常亮	电源接通
	熄灭	电源断开
PON	如表 6-2 所示。	
GE 1 & GE 2	绿色常亮	PoE 未供电&以太网连接正常
	绿色闪烁	PoE 未供电&有数据收发
	橙色常亮	PoE 供电&以太网连接正常
	橙色闪烁	PoE 供电&有数据收发
	红色常亮	PoE 供电&以太网连接未建立
	熄灭	PoE 未供电&以太网连接未建立

PON 指示灯，说明 EG8020P 连接和注册到服务提供商的 OLT（Optical Line Terminal）的情况。PON 指示灯各状态说明如下表所示。

表 6-2 指示灯状态说明二

状态编号	PON 状态	说明
1	熄灭	EG8020P 被 OLT 禁用或者没有与 OLT 建立连接
2	快闪 (2 次/秒)	EG8020P 试图与 OLT 建立连接 或者 被 OLT 检测到该设备为流氓 ONT
3	常亮	EG8020P 与 OLT 已经建立连接
4	慢闪 (1 次/2 秒)	设备故障

## 7. 常见问题

### PON 指示灯不亮

- 请检查设备光纤的连接是否正常。
- EG8020P 无法注册到 OLT，请联系服务提供商检测解决。

### 如何重启 EG8020P?

- 短按 Reset 按钮，重启设备。

## 如何恢复出厂设置？

- 长按（大于 10S）Reset 按钮，恢复出厂设置并重启设备。指示灯熄灭（除 POWER 指示灯外）然后点亮，表示系统复位。

## 8. 技术规格

项目	规格
设备尺寸（高×宽×深）	125 mm x 86 mm x 30 mm
电源适配器尺寸（高×宽×深）	68.5 mm x 46.5 mm x 33 mm
设备重量	约 185g
电源适配器重量	约 155g
工作环境温度	-5°C~+40°C
工作环境湿度	5%RH~95%RH，无凝结

# 1 Precautions

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To use the device properly and safely, read the precautions carefully before using the device and strictly observe these precautions when using the device.

## **Security warning and Precautions:**

- The device is class 1 laser product and do not look directly into the optical port without eye protection.
- The device complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Keep the device out of the reach of children as the components or accessories may be swallowed.
- Install the device in strict compliance with the requirements of the supplier (Only support the 86-type junction box or the standard junction box (110 mm x 125 mm x 30 mm) mounting). Reserve a space of at least 10 cm above and around the device for heat dissipation. During the installation, keep the device away from electric appliances that generate strong magnetic or electric fields, such as microwave ovens, refrigerators, and mobile phones.
- The power supply voltage of the device must meet the requirements on the input voltage.

- Do not use any power adapters that are not in the standard configuration. Otherwise, the device may be abnormal or unsafe.
- Dry your hands before connecting or disconnecting cables. Stop the device and switch off the power before connecting or disconnecting cables.
- Do not place any object on the device, so that the device will not be damaged due to overheating or deformation.
- Prevent objects, such as metal, from entering the device through the heat dissipation hole.
- Do not lead the strength member of the optical fiber or other metal parts indoors. Adopting these measures will help prevent device damage and bodily injuries which are especially prone during thunderstorms.
- Switch off the power and disconnect all cables, including the power cable, optical fiber, and network cable, during periods of lightning activities.
- Do not install network cables, power adapters or power adapter cables outdoors. Adopting these measures will help prevent device damage and bodily injuries which are especially prone during thunderstorms.
- If an abnormality occurs, for example, liquid entering the device, smoke, unusual sound, and smell, stop the device immediately, switch off the power, disconnect all cables (such as the power cable, optical cable, and network cable) to the device, and contact the authorized service center.

- Do not disassemble the device without permission. In the case of a device fault, contact the authorized service center.
- Dispose of the packing materials, expired batteries, and old or abandoned devices in accordance to local laws and regulations (recycling them is strongly recommended).
- Do not change the structure, safety design, or performance design of the device without prior authorization.
- Use of controls or adjustments or performance of procedures other than those specified herein) may result in hazardous radiation exposure. Comply with IEC 60825-1 2<sup>nd</sup> edit 2007-03.

#### **Fire Warning and Precautions:**

- The equipment needed to be far away from the large heat source, naked fire, and large power equipment, such as electric heater, candles, hair dryer, avoid introducing safety risk.
- Near power lines - equipment or equipment, such as aging or aging cable plug board and other facilities, please timely replacement, to avoid the introduction of safety risk.

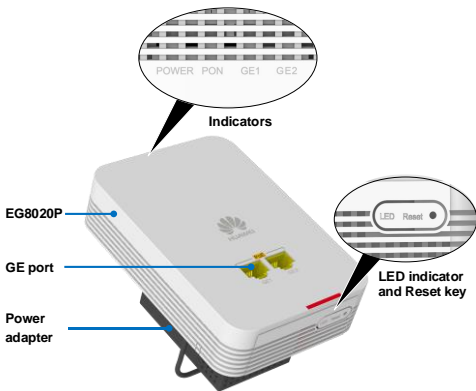
## 2 Appearance

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The EG8020P needs to be used with auxiliary power adapters produced by Huawei. Therefore, this section describes the EG8020P as well as the required power adapter.

The EG8020P can adapt to the 86-type junction box and the standard junction box (110 mm x 125 mm x 30 mm). To adapt to these boxes, the EG8020P uses different shells and fixing plates. For details about the shell and fixing plate differences, see the following section. The 2 types of junction boxes have similar functions and installation steps. The 86-type junction box is used as an example in this document for easy description.

The following figure shows the EG8020P and power adapter.

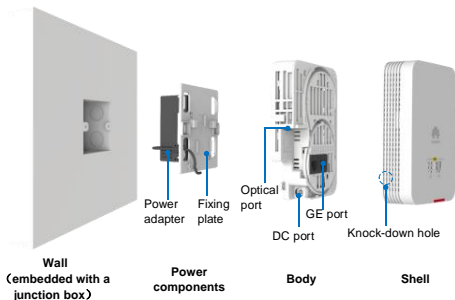




**Table 2-1** Buttons and indicators

No.	Button and Indicator	Description
1	LED	This button is used to turn on or off all indicators on the device.
2	Reset	Restart button. For details, see 7 FAQs.
3	POWER/PON/GE1/GE2	For details, see 6 Description of LEDs.

The following exploded diagram shows the appearance of the EG8020P.

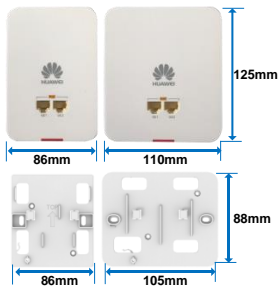




## NOTE

- The figures shown in this document may differ from the actual products. However, the difference does not affect the product functions.
- Knock-down hole is the hole reserved on the shell. The hole edges are cut off and adhesive to the shell. To drill holes, break the adhesive part using a tool such as a plier to obtain complete holes for cable routing.
- For details about the ports, see 4 Connecting Cables.

To adapt to the 2 types of junction boxes, different product shells and fixing plates are provided for the EG8020P. The following figure shows different shells and fixing plates. The left ones apply to the 86-type junction box, and the right ones apply to the standard junction box.

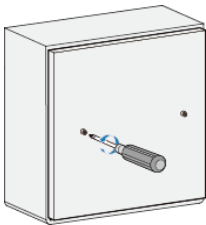


# 3 Installing the EG8020P

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The EG8020P can be simply and quickly installed on the panel of the 86-type junction box. To install the EG8020P, perform the following steps:

- Step 1** Use a screwdriver to remove the panel of the 86-type junction box from the wall. (Skip this step if there is no panel.)



- Step 2** Prepare the power terminal as follows:

1. Insert the power poles into the cold press terminal which supports the  $1.0\text{mm}^2$  cable.



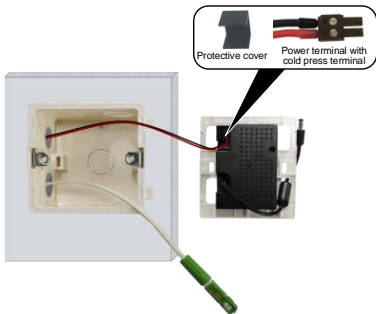
2. Remove the protective cover from the power terminal, and use a flat-head screwdriver to loosen the screw on the terminal.



## NOTE

The power terminal supports cables with a diameter of 0.25mm to 1.3mm after stripping.

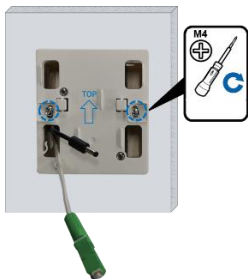
3. Insert the cold press terminal into the power terminal. Last, tighten the screw, install the protective cover, and insert the power terminal into the power port.



 **NOTE**

The power cable can be inserted into the terminal without the need of distinguishing the positive and negative poles.

**Step 3** Lead the power connector and route the optical fiber out of the hole in the lower left corner of the fixing plate, install the power adapter on the 86-type junction box, and secure it using M4x30 screws.



 **NOTE**

- When installing the fixing plate, ensure that the plate is flat. If the installation torque is too large, the fixing plate

may be deformed and the installation of the EG8020P may be affected.

- Required ST3.5x40 screws are used to install the power adapter on the standard junction box.

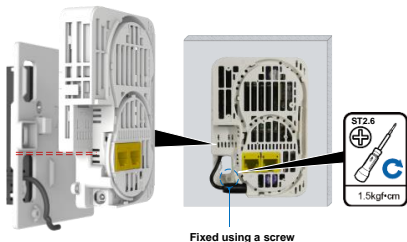


## CAUTION

- The fixing plate must be installed according to the direction shown in the above figure.
- When fixing the power adapter, do not press the optical fiber.
- To route the optical fiber to the product from the outer side of the 86-type junction box, you do not need to route the optical fiber through the fixing plate. To prevent the optical fiber from being pressed, remove the knock-down hole from the shell.  
For details, see step 7.

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**Step 4** Remove the EG8020P shell, and then mount the main components to the fixing plate and secure the components using ST2.6x6 screws.



## NOTE

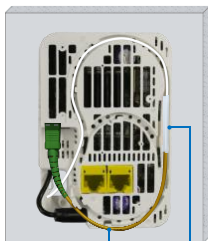
When mounting the EG8020P to the fixing plate, align the EG8020P with the fixing plate according to the end face (as shown in the horizontal red line in the figure), and the slide the EG8020P downwards to lock it.

**Step 5** Terminate the drop cable as follows: create an optical fiber connector through mechanical splicing (using an field-mounter optical connector) or fusion splicing (splicing a jumper).

**Step 6** Insert the connector of the power adapter into the power port of the EG8020P, and coil the optical fiber as shown in the following figure. Adjust the optical fiber based on the actual situation.



Fast connector



Splicing the drop  
cable and jumper

Splice protection  
tube



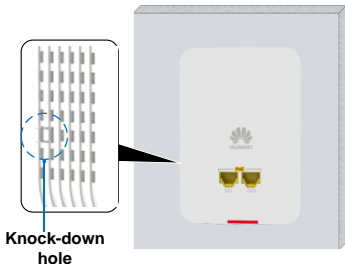
## NOTE

- Coil the optical fiber in a big circle of about 295 mm or a small circle of about 190 mm.
- To ensure that the optical fiber can be used normally, you are advised to route the optical fiber out of the trough before inserting it into the connector, as shown in the following figure.





**Step 7** Ensure that all optical fibers are in the trough and close the shell. If an optical fiber is routed from the outer side of the 86-type junction box, knock off the knock-down hole on the lower left side of the shell.



## CAUTION

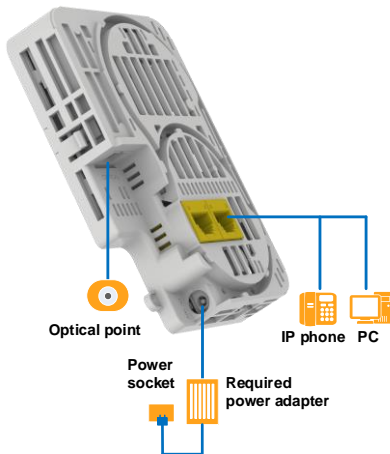
Before installing the shell, ensure that the optical fibers are well coiled without tilting to prevent the optical fibers from being pressed by the shell.

---

# 4 Connecting Cables

---

The following figure shows the cable connections.



**Table 4-1** The following table lists the port and description.

No.	Port	Description
1	Optical port	GPON port and SC/APC connector. If the user uses SC/UPC interface, please switch with the patch cord from APC to UPC.
2	DC power supply port	You are advised to use the required power adapter provided by Huawei. Otherwise, the EG8020P may be damaged.
3	GE port	It is a service LAN port used for connecting to the Ethernet and support PoE power supply. It can be also used to connect devices such as IP phones and PCs.

# 5 Logging In to the Web Page

---

Please log in to the Web page of the EG8020P as follows:

- Step 1** Configure the IP address of the PC to be in the same subnet as the LAN IP address of the EG8020P. For example:  
IP address: 192.168.18.10  
Subnet mask: 255.255.255.0



## NOTE

EG8020P factory default values of managed IP address and subnet mask:

IP address: 192.168.18.1

Subnet mask: 255.255.255.0

- Step 2** Enter the LAN IP address of the EG8020P in the address bar of the Internet Explorer (IE), and then press Enter to display the login dialog box.
- Step 3** On the login window dialog box, enter the user name Epuser and default password userEp, select Web page language, and then click Login and wait. After the password passes the authentication, the Web page of the EG8020P is displayed.



## NOTE

- If the version of the IE browser you are using is IE 8.0 or lower version, **you are advised to upgrade it to IE 11.0 or higher version** in order to access the Web interface properly.
- If not perform any operation within five minutes after you log on to the Web interface, timeout, the system automatically returns logged.
- Three consecutive enter the wrong user name and password, the system is locked, unlock automatically after one minute.
- Initial user name and password to log in to the Web interface, please change my password.

# 6 Description of LEDs

**Table 6-1** LED status indications 1

LED	Status	Description
POWER	Green: always on	The device is powered on
	Off	The power supply is cut off
PON	See Table 6-2.	
GE 1 & GE 2	Green: always on	PoE is off, and the Ethernet connection is in the normal state.
	Green: blinks	PoE is off, and data is being transmitted on the Ethernet port.
	Orange: always on	PoE is on, and the Ethernet is connected.
	Orange: blinks	PoE is on, and data is being transmitted on the Ethernet port.
	Red: always on	PoE is on, and the Ethernet connection is not set up.

LED	Status	Description
	Off	PoE is off, and the Ethernet connection is not set up.

PON is GPON LED. The status of PON reflects the connection between EG8020P and the optical line terminal (OLT). The following table describes the status of the PON LED.

**Table 6-2** LED status indications 2

No.	PON Status	Description LED Status
1	Off	The EG8020P is disabled by the OLT or the connection between the EG8020P and the OLT is not set up
2	Blinks quickly (twice per second)	The EG8020P is attempting to set up a connection to the OLT or the OLT detects that the device is a rogue ONT.
3	Always on	The connection between the EG8020P and the OLT is set up
4	Blink slowly (every 2 seconds)	The EG8020P is faulty.

The LOS indicator is blinking.

- When the LOS indicator blinks slowly, check whether the pigtail fiber is connected normally and whether the optical connector is contaminated.
- When the LOS indicator blinks quickly, check whether the EG8020P transmits optical signals normally.

The PON indicator is off.

- Check whether the optical fiber is properly connected.
- The EG8020P fails to register with the OLT. Contact the service provider for help.

How to reset the EG8020P?

- Press the Reset button.

How can I restore factory defaults?

- Press Reset button for longer than 10s to restore factory defaults and reset the EG8020P. If the indicator is off (except for the POWER indicator) and then is lit, the system restarts successfully.



# 8 Technical Specifications

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Item	Specifications
Device dimensions (H × W × D)	125 mm × 86 mm × 30 mm
Power adapter dimensions (H × W × D)	68.5 mm × 46.5 mm × 33 mm
Device weight	About 185 g
Power adapter weight	About 155 g
Working temperature	-5°C to + 40°C
Working humidity	5% RH – 95% RH (non condensing)



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**联系电话：**\_\_\_\_\_

电子邮箱：\_\_\_\_\_

产品型号：\_\_\_\_\_

序列号：\_\_\_\_\_

购买日期：\_\_\_\_\_

发票号码：\_\_\_\_\_

销售单位名称：\_\_\_\_\_

销售单位地址：\_\_\_\_\_

销售单位电话：\_\_\_\_\_

**用户保存 遗失不补**



销售单位：(盖章)

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- 2、由于擅自拆机、改装等人为原因造成的故障。
- 3、由于使用环境不符合产品要求造成的故障。
- 4、由于不可抗因素（如火灾、地震、雷击等）而造成的故障或损坏。
- 5、未按设备手册中的要求使用、维护、保养而造成的损坏。
- 6、使用过程中引起的设备外壳、电源等的破损。
- 7、保修卡与产品序列号不符或者保修卡被涂改。

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# Warranty Card

Thank you for choosing Huawei Technologies Co., Ltd. To get better services, please read this warranty card carefully, fill in the required information, and preserve this card in good condition.

Personal or Company Full Name	
Address/Postal Code	
Telephone Number	
Email	
Product Type	
Product Serial Number	
Purchase Date	
Invoice Number	
Dealer's Name	
Dealer's Address	
Dealer's Telephone	

**Pre serve well. No reissue.**

Dealer's Seal

# Limited Warranty

Subject to the exclusions contained below, Huawei Technologies Co., Ltd.

(hereinafter referred to as Huawei) warrants its access terminals ("Products") to be free from defects in materials and workmanship under normal consumer usage for one year from the date of purchase of the product ("Warranty period"). During the warranty period, a Huawei authorized service partner shall remedy defects in materials and workmanship free of charge.

## **Special Notice:**

1. The warranty card shall be applicable only after being stamped by the dealer.
2. The warranty card must be preserved in good condition and free of any scratch or alteration.
3. To claim such service for defects that are not included in the following exclusion terms, the warranty card and the invoice that records the product serial number shall be presented to a Huawei authorized service partner.

## **Exclusions:**

In any of the following cases, the warranty card becomes unenforceable or inapplicable without prior notice:

1. The defects are caused by improper handling in transportation and assembly.
2. The defects are caused by the fact that the product is dismantled or altered by anyone that is not from a Huawei authorized service partner.
3. The defects are caused by the fact that the product is used in a harsh environment that is not suitable for the operation of the product.



4. The defects are caused by any force majeure including but not limited to fire, earthquake, lightning and tsunami.

5. The defects are caused by the fact that the product is used or handled improperly, roughly or not as instructed in the applicable User Guide.

6. The normal wear and tear, including but not limited to the normal wear and tear of the shell and the power module, shall not be covered by the limited warranty.

7. The warranty card is altered or illegible, or the product serial number recorded on the warranty card is inconsistent with the actual one imprinted or labeled on the product.

In any case that is not covered by this limited warranty or should the warranty expire, Huawei shall charge for the service(s) claimed for the products if the product is still remediable. Huawei preserves the right for interpretation of this limited warranty.



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Ltd.

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Bantian, Longgang

Shenzhen 518129

People's Republic of China

Website: <http://www.huawei.com>



# 电子电气产品有毒有害物质申明

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二 苯醚 (PBDE )
结构件	○	○	○	○	○	○
单板/电 路模板	×	○	○	○	○	○
信号线	×	○	○	○	○	○
线缆连 接器	×	○	○	○	○	○
电源适 配器	×	○	○	○	○	○
配套设 备	×	○	○	○	○	○

本表格依据 SJ/T 11364 的规定编制。

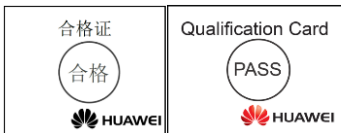
○：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

×：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。

## 说明

- 1、外壳等结构件：其中的钢材、铝材或铜材中含铅。
- 2、单板/电路模块：
  - PCB 表面焊盘含铅。
  - 单板上陶瓷/穿心/云母电容和贴片电感含铅。
  - 钟振内部电阻含铅。
  - 光收发一体模块内部光玻璃和光接头等部位含铅。
  - 射频同轴连接器含铅。
  - 变压器内部连接点用到铅含量在 85% 以上的高温焊料。
  - 贴片电感，铅用于光玻璃中。
  - 晶体管芯片焊接使用的高温焊料属于有铅焊料。
  - 电阻器使用了陶瓷，陶瓷中含铅。
  - 单板上 IC、电源等元件引脚及焊料含铅等。
- 3、信号线：其中的钢材、铝、铜等合金材料中含铅。
- 4、线缆连接器：大部分连接器金属外壳、端子等含铅，引脚含铅等。
- 5、电源适配器：内部含铅。
- 6、配套设备中的电路板含铅，同上述第 1 条、第 2 条。





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