

EchoLife HG8045A GPON Terminal

Quick Start



Safety Precautions

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

- Do not look directly into the optical port without eye protection.
- 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. 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 of the device.
- 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.
- Switch off the power and disconnect all cables, including the power cable, optical fiber, and network cable, during periods of lightning activities.
- Do not lead the strength member of the optical fiber or other metal parts indoors. Do not install telephone lines, 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.

Product Overview

Product	Function
HG8045A	4 Ethernet ports - Wi-Fi access

Technical Specifications

Item	Specifications
Dimensions (L x W x H)	176 mm x 138 mm x 28 mm
Weight (including the power adapter)	About 350 g
Power supply	11 - 14 V DC, 1 A
Power adapter input	100 - 240 V AC, 50 - 60 Hz
Maximum power consumption	≤8 W
Working temperature	0°C - +40°C
Working humidity	5% - 95% (non-condensing)
System power supply	See the nameplate on the device.



NOTE

The appearance shown in this document may be different from the actual appearance of the product. The actual product provided by the carrier prevails.

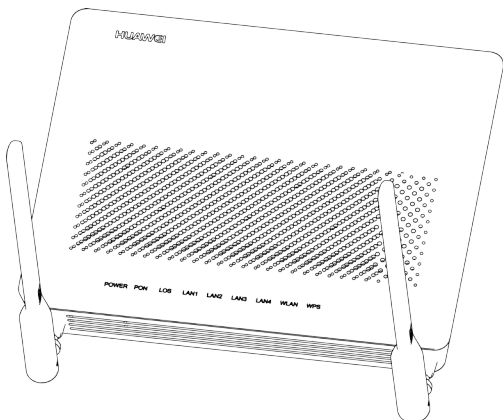
Installing the GPON Terminal



Caution

1. Do not install GPON terminals outdoors or on the outdoor cabinets.
2. GPON terminals can be mounted onto a wall or be placed on a workbench. Do not install GPON terminals in other modes, such as the ceiling.
3. The terminal cannot be connected to other devices such as GPON terminals, switch and router.

The schematic diagram for placing the device on a desk horizontally is as follows:



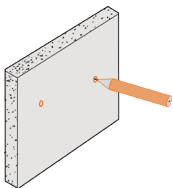
Mounting a GPON terminal onto the wall

Step 1 Mark the positions of two holes used for mounting a GPON terminal, ensure that the two holes have the same spacing as the two mounting holes.

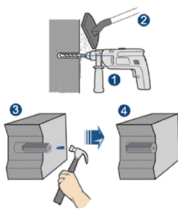
Step 2 Select a proper drill according to the outer diameter of the screws. Use a hammer drill to drill the marked positions on the wall. Then clean the wall and install two expansion bolts.

Step 3 Use a screwdriver to fasten the screws into the expansion bolts, leaving the heads of the screws 3 mm over the wall. Then install the GPON terminal to the screws.

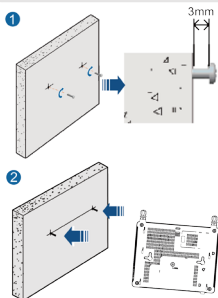
1. Mark the installation positions.



2. Drill two holes and install expansion bolts.

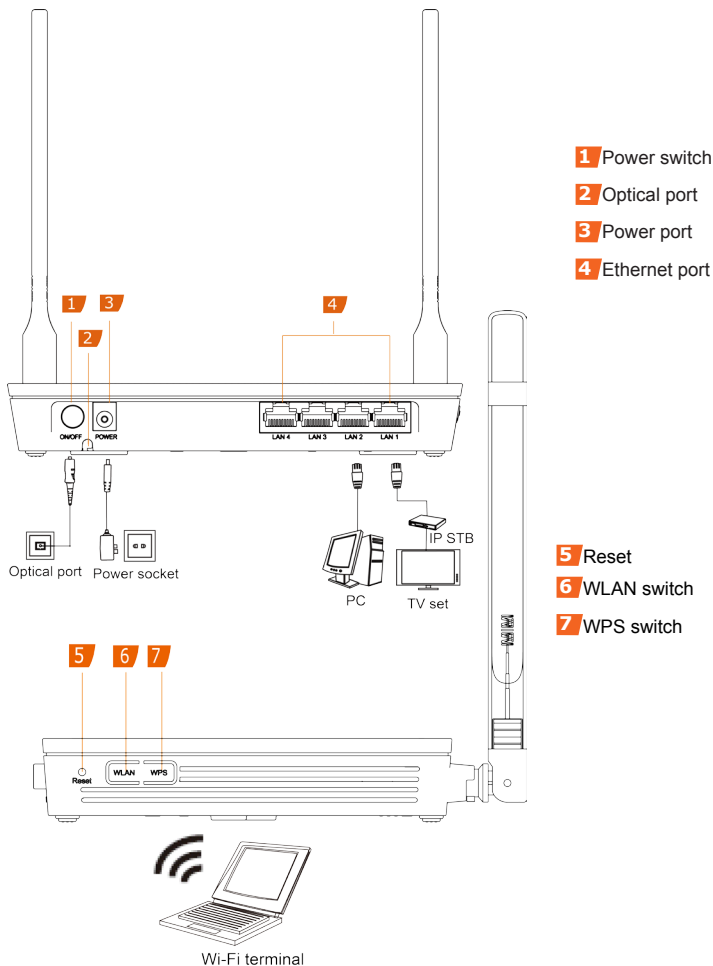


3. Install screws and the GPON terminal.



Connecting Cables

The connections between the HG8045A and other devices are shown as follows.



Step 1 Use an optical fiber to connect the optical port on the ONT and the optical port on the wall. The optical port of the HG8045A is at the back of the device.



NOTE

1. The optical connector connected to the **OPTICAL** port is an SC/UPC connector, and the type of the optical connector connected to the optical port in the wall is determined by practical conditions.
2. To ensure normal use of fibers, make sure that the fiber bend radius is larger than 30 mm.

Step 2 Use a network cable to connect the **LAN** port to a PC or the Ethernet port on the IP STB.

Step 3 Use a power adapter to connect the **POWER** port to the power socket.



NOTE

The preceding figure connects the power adapter as an example. When connecting the backup battery unit, please see the usage guide to the backup battery for details.

Step 4 Press the **ON/OFF** power switch.

Step 5 Press the **WLAN** switch to enable the Wi-Fi access function. By default, this function is enabled.

Step 6 Press the **WPS** switch to enable the WPS encryption function.



NOTE

Before enabling the WPS encryption function of a GPON terminal, ensure that the function is set in the system software in advance. After successful setting, press the **WPS** switch for the settings to take effect.

Logging in to the Web Configuration Window

Step 1 Set the IP address of the PC in the same subnet as the management IP address of the GPON terminal. For example,

-IP address: 192.168.100.100

-Subnet mask: 255.255.255.0



NOTE

The default management IP address and subnet mask of the GPON terminal are as follows:

-IP address: 192.168.100.1

-Subnet mask: 255.255.255.0

Step 2 Enter the management IP address of the GPON terminal in the address bar of Internet Explorer and press **Enter**.

The login window is displayed.

Step 3 In the login window, select your preferred language, enter the user name and password (default user name is **root** and default password is **admin**), and click **Login**. After the password is authenticated, the Web configuration window is displayed.



NOTE

- If you do not perform any operations after logging in to the system for five minutes, you will exit the system and the system automatically returns to the login interface.
- The system will be locked if you input incorrect user name and password three consecutive times. One minute later, it will be unlocked.
- Change the initial password after logging in to the web page.

Configuring Wi-Fi Parameters

Step 1 Choose the **WLAN** tab and choose **WLAN Basic Configuration**.

Step 2 In the pane, select the **Enable WLAN** option box. In the dialog box that is displayed, set the basic Wi-Fi parameters, including the SSID, authentication mode, and encryption mode. For example,

- SSID: See the nameplate on the device.
 - WPA PreSharedKey: See the nameplate on the device.
- SSID indicates the name of a wireless network searched by the Wi-Fi terminal; WPA PreSharedKey indicates the authentication password for the Wi-Fi terminal to access a wireless network.

Step 3 Click **Apply**.



NOTE

HG8045A supporting Wi-Fi, a wireless network coverage is subject to the number, thickness, and positions of walls, materials, ceilings, or other objects that radio signals traverse. Besides, material type and background radio frequency (RF) noise also affect the coverage of a wireless network. You can maximize the coverage of a wireless network using the following methods:

1. Decrease the number of walls and ceilings between HG8045A and other network devices.

Each wall or ceiling reduces the coverage of a wireless network by one to 30 meters. Install HG8045A at a proper place to avoid walls or ceilings whenever possible.

2. Observe the straight line rule when installing network devices.

The distance for which signals have to traverse at a 45° corner of two 0.5 meter-thick walls reaches approximately one meter. To better receive signals, devices should be installed at places where signals can directly traverse walls or ceilings.

3. Note the impact of building materials on the wireless network coverage.

A metal door or aluminum wall may limit the coverage of a wireless network. Install access points, wireless routers, and computers, so signals can traverse walls or open passageways. Materials and objects such as FRP products, metal products, insulative walls, filing cabinets, bricks, and concrete weaken radio signals.

4. When connecting ONT (such as HG8045A) to a wireless network, keep it far from the following devices:

- Electronic devices or components that produce RF noises (keep a distance of more than 2 meters between such a device and HG8045A.)
- 2.4 GHz wireless mobile phones or X-10 devices (such as microwave ovens, home security systems, blue-tooth devices, and refrigerators) that greatly weaken or even eliminate radio signals. Even if a 2.4 GHz wireless mobile phone is not connected to a wireless network, the phone base still sends signals that interfere the wireless network.

Indicator Description

Table 1 Indicator status description 1

Indicator	Status	Description
WPS	Steady on	The WPS function is enabled.
	Blinking	A Wi-Fi terminal is accessing the system.
	Off	The WPS function is disabled.
WLAN	Steady on	The WLAN function is enabled.
	Blinking	Data is being transmitted.
	Off	The WLAN function is disabled.
LAN1–LAN4	Steady on	The Ethernet connection is in the normal state.
	Blinking	Data is being transmitted on the Ethernet port.
	Off	The Ethernet connection is not set up.
LOS/PON	See Table 2.	
POWER	Steady green	The terminal is powered on.
	Steady yellow	The backup battery is supplying power.
	Off	The power supply is cut off.

Table 2 Indicator status description 2

Status No.	Status		Description
	PON	LOS	
1	Off	Off	The PON terminal is prohibited by the upper-layer device, contact the service provider for help.
2	Blinks twice a second	Off	The GPON terminal attempts to set up a connection with its upper-layer device.
3	Steady on	Off	A connection is set up between the GPON terminal and its upper-layer device.
4	Off	Blinks once two seconds	The PON terminal is not connected to optical fibers or does not send optical signals.
5	Blinks twice a second	Blinks twice a second	The GPON terminal is a rogue terminal, contact the service provider for help.
6	Blinks twice a second	Blinks once two seconds	The Rx optical power of the PON terminal does not within the range (–27 dBm to –8 dBm) of the Rx sensitivity.
7	Blinks once two seconds	Blinks once two seconds	The hardware is faulty.

FAQs

The **LOS** indicator blinks.

- If the LOS indicator blinks once two seconds, check whether the pigtail fiber is properly connected and the connector is clean.
- If the GPON terminal blinks twice a second, contact the service provider for help.

The **PON** indicator is off.

- Check whether the **OPTICAL** port and optical fiber is properly connected.
- The GPON terminal fails to register with the upper-layer device. Contact the service provider for help.

The phone does not ring upon an incoming call but communication is in normal state when the phone is in off-hook state.

- The GPON terminal provides a maximum of 60 V AC ringing current voltage. Check whether the ringing current voltage of the phone is higher than 60 V AC. If it is higher than 60 V AC, replace it with another phone.

How to reset the GPON terminal?

- Press **Reset** by using a needle-type object.

How can I restore factory defaults?

- Press **Reset** by using a needle-type object for longer than 10s to restore factory defaults and reset the GPON terminal. If the indicator is off and then is lit, the system restarts successfully.



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.

User Information

Personal or
company's full name: _____

Address/Postal Code: _____

Telephone: _____

Email: _____

Product Type: _____

Product Serial Number: _____

Purchase Date: _____

Invoice Number: _____

Dealer's Name: _____

Dealer's Address: _____

Dealer's Telephone: _____

Preserve well. No reissue.

Dealer's Seal



Limited Warranty

Subject to the exclusions contained below, Huawei Technologies Co., Ltd. (Huawei for short) 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 that product serial number shall be presented to a Huawei authorized service partner.

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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 incorrectly, 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 reserves all rights to interpret this limited warranty.



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Notice

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FCC statement

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

- These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

- If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

RF exposure warning

- This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

NOTE: THE GRANTEE IS NOT RESPONSIBLE FOR ANY CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE. SUCH MODIFICATIONS COULD VOID THE USER' S AUTHORITY TO OPERATE THE EQUIPMENT.

Statement

- This device PA02 doesn't support the function to modify the country code, and the channel 12 and 13 are closed in the device PA02.