

Warranty Description



When you purchase a product offered by FiberHome from an authorized dealer, you have a 12-month warranty as standard, except for man-made causes. The warranty period begins on the date of invoice.

For your lawful rights and interests, please notice:

1. The Warranty Card shall come into force with the seal of dealer.
2. Please keep this card properly. No reissuance will be provided if you lose it and it becomes invalid if altered.
3. In the event of a non man-made malfunction during the warranty period, FiberHome will repair or replace this product to its original operating condition free of charge.

Warranty does not cover the following circumstances:

1. Damage or malfunction caused by transporting, loading and unloading.
2. Damage or malfunction caused by man-made reasons such as opening or remodel the machine on users' own.
3. Damage or malfunction caused by unsatisfactory environment.
4. Damage or malfunction caused by force majeure incidents (such as fire, earthquake, lightning strike, war).
5. Damage or malfunction caused by failure to operate and maintain in accordance with the user's manual.
6. Damage of external parts such as equipment enclosure, power connector in operation.
7. The inconsistency of the Warranty Card and the product serial number, or the warranty card has been altered.

We provide paid repair and maintenance service for the products that are beyond the warranty scope. The final explanation rights of this warranty description are reserved by FiberHome.



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CERTIFICATION

CHECKER

DATE



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CODE 128码

MN000004499A



GPON Optical Network Unit

HG6143D

Code:MN000004499 Version:A

User Manual

This document is intended to be used for reference only.

1 Operation Safety Rules

For a correct, safe use of the equipment, please read the following carefully and strictly observe the operation safety rules during your operations.

- High optical power can cause bodily harm, especially to eyes. Never look directly into the end of the optical transmitter fiber jumper or the end of its active connector.
- Exercise care if you must bend fibers. If bends are necessary, the fiber bending radius should never be less than 38mm.
- Power socket overload, broken cables or broken plugs may cause electric shock or fire. Regular check-ups on power supply wires and cables are essential. If any appears damaged, replace at once.
- Use the power supply adapter provided in the package only. Using other adapters may cause equipment damage or operation failures.
- Install the equipment in a well ventilated environment without high temperatures or direct sunlight to protect the equipment and its components from overheating, which can result in damage.
- Power off the equipment in the event of lightning storms. Disconnect all cables connected to the equipment such as power cable, network cable and telephone line to avoid equipment damages caused by lightning stroke.
- Avoid moisture, dampness and water damage. Equipment exposed to water cannot work normally and can be extremely hazardous due to shorting.
- Do not lay this equipment on an unsteady base.

2 Product Introduction

The HG6143D is an FTTH GPON optical network unit. It provides communication and entertainment service in multiple modes such as data, voice and video, to meet integrated access requirement of families or small enterprises. The HG6143D supports these functions:

- Uses GPON uplink that is compliant with ITU-T G.984 series of standards;
- Supports the configuration of Ethernet interface rates, working modes, MDI / MDIX auto-negotiation mode;
- Supports packet filtering and DoS attack protection;
- Provides performance statistics on all Ethernet lines;
- Supports obtaining the user IP address in the DHCP mode, supports reporting the physical position information of Ethernet interfaces through DHCP Option82;
- Supports obtaining the user IP address in the PPPoE mode, supports the PPPoE+ function for accurate user identification;

- Supports various voice protocols including H.248 and SIP;
- Supports IGMP snooping protocol;
- Supports the L2 / L3 wire speed forwarding;
- Supports the AES-128 algorithm for encryption of downlink data;
- Supports global configuration of queue priorities and flexible 802.1p-to-queue mapping;
- Supports the PQ queue scheduling mode. You can configure the weight of scheduling queue to ensure the QoS of the services with high QoS requirement such as voice and video under multiple service conditions;
- Supports wireless access mode, compliant with the IEEE 802.11 a/b/g/n/ac standard;
- Supports the authentication modes such as OPEN, SHARED, WPA-PSK, WPA2-PSK, WPA-PSK/WPA2-PSK. Supports the encryption modes such as NONE, WEP, TKIP, AES, and TKIP/AES.

3 Product Type



HG6143D

4 GE interfaces
1 phone interfaces
Wi-Fi interface

External antenna

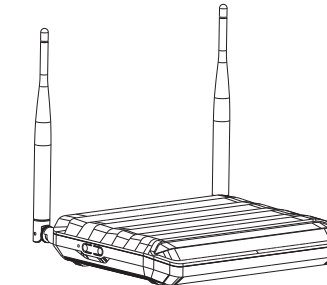
4 Technical Specification

Type	Item	Description
Mechanical parameter	Dimension	36.8mm×204mm×149mm(H×W×D)
	Weight	339g approximately
Power supply parameter	DC	DC 12V/1.5A
Power consumption parameter	Power consumption	<10W
Environmental parameter	Operating temperature	-5°C to 45°C
	Storage temperature	-40°C to 70°C
	Environmental humidity	10% to 90%, non-condensing

5 Equipment Installation

The HG6143D can be placed horizontally or vertically on a desk, or hung against the wall.

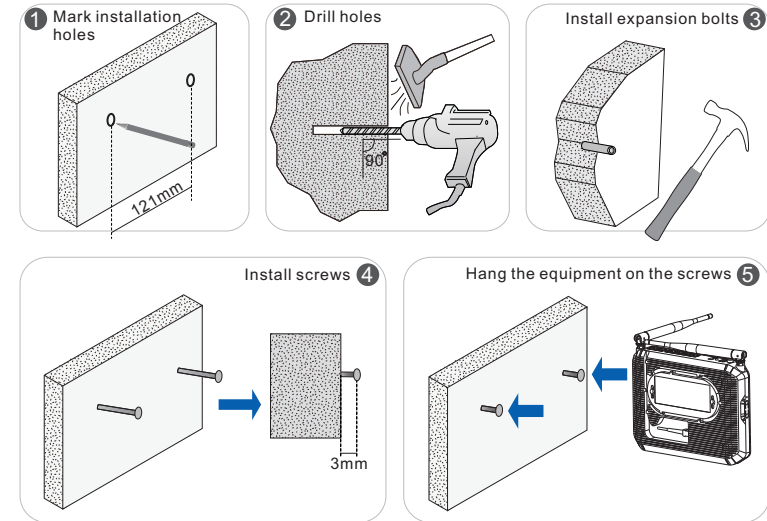
Horizontal desk top mounting



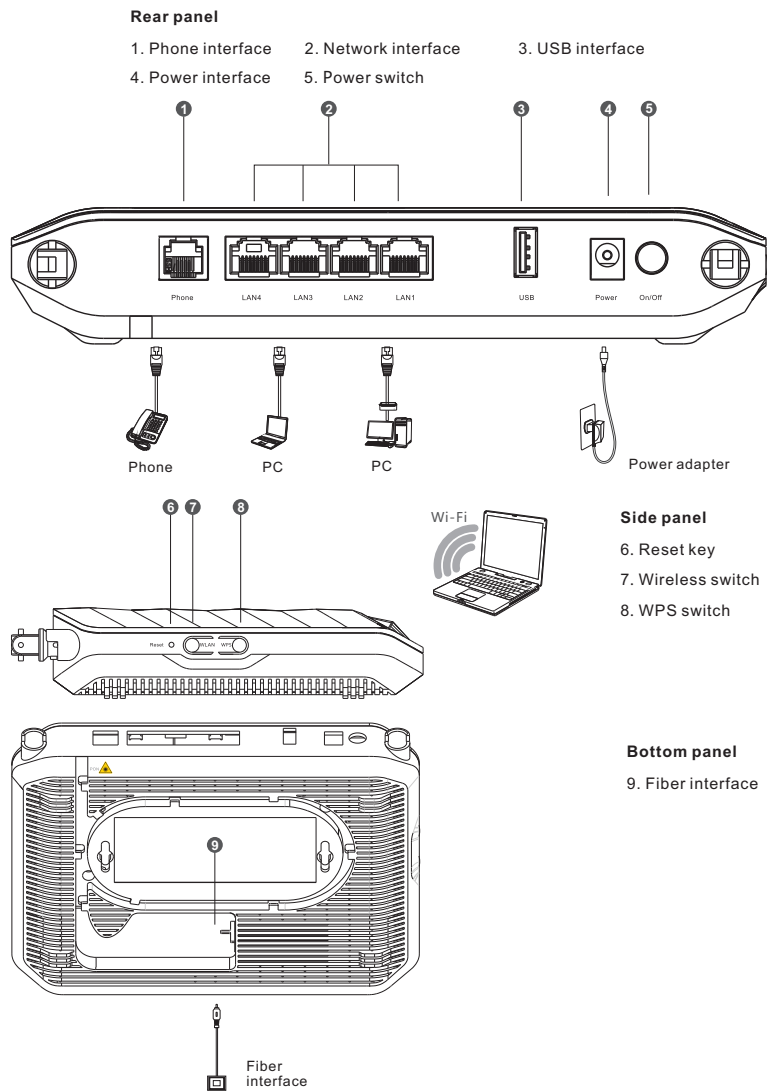
* The picture only for you reference!

Note: The base is optional and you can choose whether to order it based on your demand.

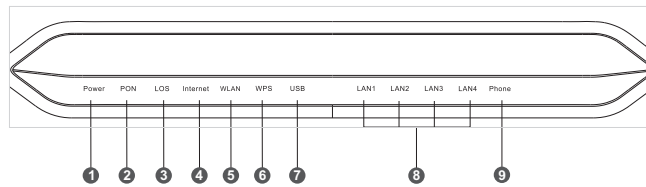
Wall mounting



6 Interfaces and Connections



7 Indicator LED Description



	ON	Blinking	OFF
1 Power status LED (green)	The equipment is powered on.	—	The equipment is not powered on.
2 Registration status LED (green)	The ONU is activated.	The ONU is activating.	The ONU is not activated.
3 Optical signal status LED (red)	—	No optical signals are received.	Optical signals are received.
4 Internet status LED(green)	The access to Internet is normal.	The access to Internet is normal with data transmission.	No access to Internet.
5 Wi-Fi signal status LED (green)	The interface is enabled.	The interface has traffic.	The interface is disabled.
6 WPS status LED (green)	The WPS is enabled and connected.	The related negotiation is conducted via WPS.	The WPS is not enabled or connected.
7 USB status LED (green)	The USB is connected.	—	The USB is not connected.
8 Ethernet interface status LED (green)	The interface is connected to the subscriber terminal without data transmission.	The interface is receiving / transmitting data.	The interface is not connected to the subscriber terminal.
9 Phone interface status LED (green)	The interface registration to the softswitch platform is successful.	The interface has traffic.	The interface registration to the softswitch platform failed.

Note:
Reset key: Press the button for more than 5 seconds to restore the default settings and reboot the device.

8 Logging into Web Configuration GUI

- Step 1 Set the IP address and subnet mask of the computer.
- ▶ Select the **Obtain an IP address automatically** mode (recommended).
 - ▶ Set to a static IP address in the same network segment of the management IP address (192.168.1.1 by default) of the HG6143D.
 - IP address: 192.168.1.X (X is a decimal integer between 2 and 253)
 - Subnet mask: 255.255.255.0

Step 2 Enter **192.168.1.1** in your browser's address bar. Press **Enter** to bring up the user login dialog box.

Step 3 Enter username and password (see the label at the bottom of the device for the default settings) in the login dialog box. Access the Web page after the password is authenticated successfully.

Note:
If no operation is performed in five minutes after login, the system will log out.

9 Enabling the Wireless Access Function

Step 1 Select **Network** in the navigation bar and select **Wlan Settings**→**Basic** or **Wlan Settings**→**5G Basic** in the link bar to open the page for the basic wireless configuration of the 2.4G or 5G Wi-Fi interface.

Step 2 Make sure the button next to **Radio On/Off** is **RADIO ON** and keep the default settings for other parameters, for example:

- ▶ Network Mode: 802.11 b/g/n (2.4G Wi-Fi) or 802.11 a/n/ac (5G Wi-Fi)
- ▶ Frequency (Channel): AutoSelect
- ▶ Frequency Bandwidth: 20MHz/40MHz (2.4G Wi-Fi) or 80MHz (5G Wi-Fi)

Step 3 Click **Apply** and save the configured information.

Note:

- On the Wi-Fi terminal, users can use the default SSID name and password (see the label at the bottom of the device) to connect with the wireless network.
- To modify the parameters such as SSID name, password and authentication & encryption mode, refer to "Setting Wireless Network".
- If the selected frequency band cannot be connected, it may be used by an AP device around. Try another band for connection.

10 Setting Wireless Network

Step 1 Select **Network** in the navigation bar and select **Wlan Settings**→**Advanced** or **Wlan Settings**→**5G Advanced** in the link bar to open the page for the advanced wireless configuration of the 2.4G or 5G Wi-Fi interface.

Step 2 Set the parameters of the wireless network, including SSID name, password and authentication and encryption mode.

- ▶ SSID choice: Click the drop-down list to select the SSID. The default settings for 2.4G and 5G Wi-Fi are **Enable**.
- ▶ SSID Name: Enter the wireless network name for the Wi-Fi terminal to search. It is advisable to use a name easy to identify.
- ▶ Security Mode: It is advisable to select the default security mode such as **WPA-PSK/WPA2-PSK**.
- ▶ WPA Algorithms: It is advisable to select the default encryption mode such as **TKIP/AES**.
- ▶ Pass Phrase: Enter the password for the Wi-Fi terminal to access the wireless network. It is advisable to use a complex password to guarantee the security of wireless network.
- ▶ Key Renewal Interval: It is advisable to use the default value.

Step 3 Click **Apply** and save the currently configured SSID information.

Note:

- If the SSID name and password corresponding to the default 2.4G or 5G SSID choice are modified, the default wireless network account (2.4G or 5G) will become invalid.
- If they forget the customized SSID name and password, users can log into the Web to query the information or restore the default wireless network account.
- After the device is connected with WLAN successfully, users can select **Hidden** in the **SSID Name** bar to hide the network.

11 User Management

Step 1 Select **Management** in the navigation bar. Click **Account Management**→ **User Account** in the link bar to open the account maintenance page.

Step 2 Enter the username.

Step 3 Enter the old password.

Step 4 Enter the new password.

Step 5 Re-enter the new password to confirm that the passwords entered are identical.

Step 6 Click **Apply** to save and apply the new password settings.

12 Rebooting the Equipment

Step 1 Select **Management** in the navigation bar. Click **Device Management**→ **Device Reboot** in the link bar to open the device rebooting page.

Step 2 Click **Reboot** and click **Yes** in the dialog box that appears to reboot the equipment.

Note:
Reboot the device, and wait about 2 minutes before re-logging into the Web configuration GUI.

13 FAQs

FAQ1: All indicator LEDs are extinguished after power-on.

1. Check whether the power cable is correctly connected;
2. Check whether the power supply and the power adapter are normal;
3. Check whether the power switch on the device's rear panel is in the ON position.

FAQ2: The device fails to work.

1. If the device works abnormally, check whether the power is connected normally or the voltage is not within specifications;
2. If the equipment is overheated, check the ventilation. Make sure the equipment is not exposed to direct sunshine or is near the heat source.

FAQ3: The LOS indicator LED blinks.

1. Check whether the optical fiber is damaged;
2. Check whether the optical fiber is connected normally to the appropriate interface;
3. Check whether the received optical power of the ONU is below specifications with an optical power meter;
4. Check whether the ONU optical module is aged or damaged;
5. Check whether the device at the central office end is operating normally.

FAQ4: The LAN indicator LED is extinguished.

1. Check whether the network cable is damaged or incorrectly connected;
2. Check whether the wiring color-coding scheme of the network cable is incorrect. If incorrect, replace the original network cable with a standard CAT-5 twisted-pair network cable;
3. Check whether the network cable crosses the allowed range.

FAQ5: The ONU cannot be visited via Wi-Fi.

1. Check whether the Wi-Fi function for the ONU is enabled, and whether the SSID is set to **Hidden** so that the Wi-Fi signal cannot be detected.
2. Check whether the network card driver is normally installed on the computer and whether the WLAN function for the wireless terminals like computers or mobile phones is enabled.
3. Adjust the location of the ONU, so as to reduce obstacles such as walls on the path of the signal. The distance between the ONU and the wireless terminals should be within the required range.

FAQ6: Logging into the Web page failed.

1. Check the network card configuration, browser version of the user's computer;
2. Check whether the IP address of the user's computer is correctly configured.



Warranty Card

We appreciate your purchase of FiberHome product. FiberHome warrants that the equipment will be free of defects in materials and workmanship for a period of 12 months from the date of purchase. The original, dated, bill of sale should be retained as proof of purchase and must be presented to FiberHome when the equipment is to be serviced under the provisions of this warranty.

Customer Details

Customer Name	
Address / Zip Code	
Phone	
E-mail	
Model Number	
Serial Number	
Date of Purchase	
Invoice Number	
Dealer Name	
Dealer Address	
Dealer Phone	

Please keep this card properly. No reissuance if lost.

Dealer: (Seal)