Tenda

Quick Installation Guide

HG Series xPON ONT

Package contents

- xPON ONT x 1
- Power adapter x 1
- Ethernet cable x 1
- Telephone cable x 1 (if any)
- Optical fiber cable x 1 (if any)
- Quick installation guide x 1

Get to know the ONT

LED indicators

The LED indicators may vary with models. The actual product prevails.

LED indicator	Color	Status	Description
PWR	Green	Solid on	The ONT is powered on.
		Off	The ONT is powered off.
INET	Green	Solid on	The internet access is available through the ONT.
		Blinking	Data is being transmitted through the ONT.
		Off	No internet access is available through the ONT.
PON	Green	Solid on	The ONT is registered successfully.
		Blinking	The ONT is registering.
		Off	The ONT is unregistered.
LOS	Red	Blinking	The received optical power is lower than the optical receiver sensitivity.
		Off	The received optical power is at a proper value.
LAN	Green	Solid on	The LAN port is connected. No data is being transmitted.
		Blinking	The LAN port is transmitting data.
		Off	The LAN port is disconnected.
TEL	Green	Solid on	The ONT is registered with IMS. No data is being transmitted.
		Blinking	The ONT is registered with IMS and is transmitting data.
		Off	The ONT is not registered with IMS.
WLAN/ 2.4G/5G	Green	Solid on	The Wi-Fi network is enabled.
		Blinking	Data is being transmitted wirelessly. For the device without the **WPS** LED indicator: If the WPS function is activated on the device, the **WLAN/2.4G/5G** LED indicator blinking means that the device is performing WPS negotiation.
		Off	The Wi-Fi network is disabled.
WPS	Green	Solid on for 2 minutes	A WPS connection is established.
		Blinking	The WPS negotiation is ongoing.
		Off	The WPS function is not activated.
USB	Green	Solid on	The USB port is connected. No data is being transmitted.
		Blinking	The USB port is transmitting data.
		Off	The USB port is disconnected.

Ports/Buttons

The ports and buttons may vary with models. The actual product prevails.

Port/Button	Description
ON/OFF	Press the button to turn on or turn off the ONT.
PON	Optical fiber port. Used to connect to optical network through a fiber cord.
PWR	Used to connect the ONT to a power source using the included power adapter.
USB	USB 2.0 port. Used to connect to a USB storage for resource sharing.
WLAN	Wi-Fi on/off button. Press the button to enable or disable the Wi-Fi function of the ONT.
TEL	Telephone port. Used to connect to a telephone for voice service using a telephone cable.
LAN1-4	Gigabit LAN ports. Used to connect to such devices as routers, switches, computers or IPTV set-top boxes.
WPS/RST	WPS/Reset button. • **WPS**: WPS-supported devices can connect to the Wi-Fi networks of the ONT without entering the password through WPS negotiation. Press the button for about 1-3 seconds to start the WPS negotiation process of the ONT. The WPS (marked **WLAN/2.4G/5G/WPS**) LED indicator blinks quickly. Within 2 minutes, enable the WPS function to establish a WPS connection on a WPS-supported device. • **Reset**: Restore the ONT to the configurations preset by the ISP or restore the ONT to factory settings. - To restore the ONT to the configurations preset by the ISP: After the ONT completes startup, press the button for 10 to 60 seconds and release it. All LED indicators will light off in a few seconds. When the **PWR** LED indicator lights solid on again, the ONT is restored to the configurations preset by the ISP. - To restore the ONT to factory settings: After the ONT completes startup, press the button for more than 1 minute and release it. All LED indicators will light off in a few seconds. When the **PWR** LED indicator lights solid on again, the ONT is restored to the factory settings.
LED	LED indicator on/off button. Press the button to turn on or off the LED indicators of the ONT.

Tips
This ONT supports wall mounting (two mounting holes on the bottom). The recommended parts are as follows:
- Expansion bolt: Thread diameter: 6.0 mm; Length: 26.4 mm; Inner diameter: φ2.4
- Screw: Quantity: 2; Diameter: 3.0-4.0 mm; Head diameter: 5.0-6.5 mm.

1. Connect and register the ONT

Caution, laser
DO NOT look directly at the **PON** port when the device is powered on, as well as the terminal of the indoor fiber cord, to prevent any harm to your eyes.

Connect the ONT as shown in the figure. Wait until the **PON** LED indicator lights solid on, then the ONT is registered successfully.

(Example: HG15)
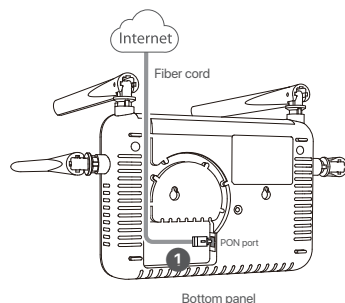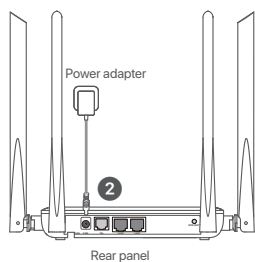
Internet

Power adapter

Rear panel

Fiber cord

PON port

Bottom panel

Tips
- HG15 is used for illustration here unless otherwise specified. The actual product prevails
- Press **ON/OFF** button (if any) to turn on the ONT.
- If ISP provides any parameters for registration, you can use them to manually register the ONT with the quick registration function. The quick registration function is available only when the ONT is registered for the first time.

Method:
❶ Log in to the web UI of the ONT.
Refer to **Step 1** in the **Router mode** of the **2. Configure the internet access**.
❷ In **GPON Settings** (or **EPON Settings**) module, register with the parameters provided by your ISP and click **Apply Changes**.

2. Configure the internet access

Tips
- PPPoE is used for illustration here. Change the parameters as required by your ISP.
- Choose a desired mode to configure your internet access:
  Router mode: Configure the internet on the ONT.
  Bridge mode: Dial-up on the router or terminal connected to the ONT.

Router mode

Step 1: Log in to the web UI

Tips
You can log in to the web UI of the ONT with user permissions or administrator permissions. Administrator permissions are for the installation and maintenance personnel only.
- **User Permissions**: Able to view and modify partial configurations of the ONT. The default login user name is **admin**. You can get the password from the bottom label on the ONT.
- **Administrator Permissions**: Able to view and modify all configurations of the ONT. Some configurations changed by the installation and maintenance personnel will affect the normal operation of the ONT. Therefore, use the administrator permissions with caution. The default login user name and password are both **admin** (or **root**).

❶ Connect to the ONT.
- Wired device: Connect a LAN port of the ONT to a wired device, such as a computer, using an Ethernet cable.
- Wireless device: Connect your wireless device, such as a smartphone, to the Wi-Fi network of the ONT using the **SSID** (Wi-Fi name) and **Key** (Wi-Fi password) on the bottom label.
❷ Start a web browser and visit **192.168.1.1**.
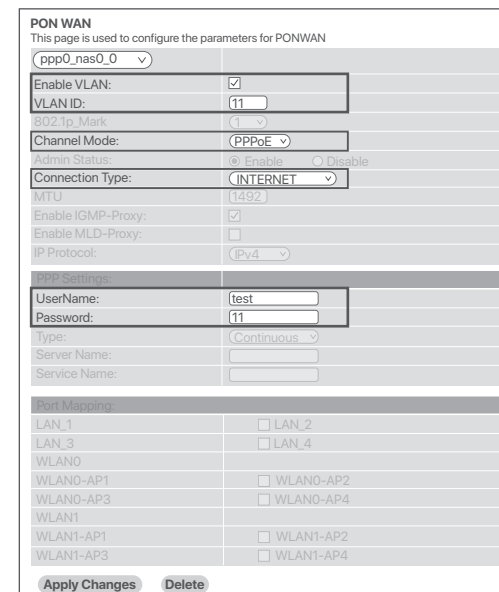❸ Enter the **User Name** and **Password** according to the actual permissions.
❹ Click **Login**.

192.168.1.1

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User Name:

Password:

Login   Reset
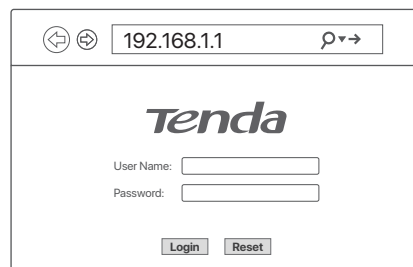
Tips
If the above page does not appear, refer to **Q1** in **FAQ**.

Step 2: Set up a WAN connection

Tips
For initial registration of the ONT, you can configure the quick registration function according to the page prompts. In **INTERNET Settings** module, you can set the parameters to set up a WAN connection according to your ISP and your own needs, and click **Apply Changes**. If not, refer to the following to set up a WAN connection.

❶ Choose **WAN** > **PON WAN**.
❷ Tick **Enable VLAN**.
❸ Enter the **VLAN ID** provided by your ISP.
❹ Set **Channel Mode** to **PPPoE**.
❺ Set **Connection Type** to **INTERNET**.
❻ Enter the PPPoE **UserName** and **Password** provided by your ISP.
❼ Set other parameters according to your ISP and your own needs.
❽ Click **Apply Changes**.
❾ Click **OK** when **Change setting successfully** is shown on the page.

PON WAN
This page is used to configure the parameters for PONWAN

ppp0_nas0_0

Enable VLAN:	☑
VLAN ID:	11
802.1p_Mark	
Channel Mode:	PPPoE
Admin Status:	Enable ○ Disable
Connection Type:	INTERNET
MTU	1492
Enable IGMP-Proxy:	☑
Enable MLD-Proxy:	☐
IP Protocol:	IPv4

PPP Settings
UserName:	test
Password:	11
Type:	Continuous
Server Name:	
Service Name:	

Port Mapping
LAN_1	☐ LAN_2
LAN_3	☐ LAN_4
WLAN0	
WLAN0-AP1	☐ WLAN0-AP2
WLAN0-AP3	☐ WLAN0-AP4
WLAN1	
WLAN1-AP1	☐ WLAN1-AP2
WLAN1-AP3	☐ WLAN1-AP4

Apply Changes   Delete

(Example: HG15)

Tips
HG15 is used for illustration here unless otherwise specified. The actual product prevails.

Done.

To access the internet:

• Connect your wired device, such as a computer, to a LAN port of the ONT.

• Connect your wireless device, such as a smartphone, to the Wi-Fi networks of the ONT, using the **SSID** (Wi-Fi name) and **Key** (Wi-Fi password) on the bottom label.

- ☀ Tips
  - If you cannot access the internet after the configuration, refer to **Q2** in **FAQ**.
  - If you want to change the Wi-Fi name and Wi-Fi password, refer to **Q4** in **FAQ**.
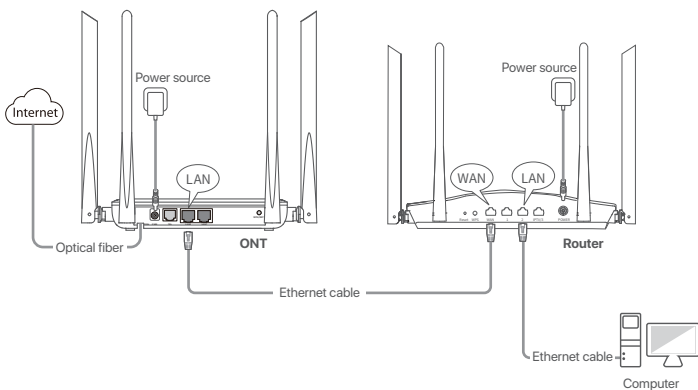
Bridge mode

- ☀ Tips
  When the ONT is set to bridge mode, configure internet settings based on ISP requirements.

Access internet over PPPoE

❶ Connect a LAN port of the ONT to the WAN port of the router using an Ethernet cable.

❷ Connect your computer to a LAN port of the router using an Ethernet cable.

❸ Set up a PPPoE connection on the router as required.

After the settings, you can access the internet through the router.

(Exemplo: HG15)

- ☀ Tips
  HG15 is used for illustration here unless otherwise specified. The actual product prevails.

FAQ

Q1: I cannot log in to the web UI by visiting 192.168.1.1. What should I do?

A1: Try the following solutions:

• Ensure that the ONT is powered on properly (the **PWR** LED indicator is solid green).

• If you use a wireless device, such as a smartphone, to configure the ONT:
  - Ensure that your smartphone has disabled mobile data and is connected to the Wi-Fi network of the ONT.
  - Clear the cache of the web browser or change a web browser and try again.
  - Use another smartphone and try again.

• If you use a wired device, such as a computer, to configure the ONT:
  - Ensure that your computer is connected to the ONT properly (the **LAN** LED indicator of the connected port lights up).
  - Ensure that your computer is set to **Obtain an IP address automatically** and **Obtain DNS server address automatically**.
  - Use another computer and try again.

• Refer to **Q3** to reset the ONT and try again.

Q2: I cannot access the internet after the configuration. What should I do?

A2: Try the following solutions:

• Check the LED indicator status of ONT:
  - If the **PWR** LED indicator is off, ensure that the ONT is powered on properly.
  - If the **LOS** LED indicator blinks, ensure that the **PON** port is clean and connected properly, the fiber cord is not bent excessively and the input optical power is within the normal range (Rx Power between -28 dBm to -8 dBm in GPON mode (or -27 dBm to -3 dBm in EPON mode) on the **Status > PON** page).
  - If the **PON** LED indicator blinks, the ONT is not registered. Contact your ISP or verify the parameters for registration are correct.

• Ensure that your ISP supports self-purchased PON device for internet access.

• If you set the ONT to the router mode:
  - Ensure that the ONT obtains a valid IP address and gateway on the **Status > Device > WAN Configuration** page. If not, the WAN connection is not set up successfully. Verify the parameters are correct.
  - Ensure that the wired device is connected to a LAN port of the ONT or downstream router (if any) properly and set to **Obtain an IP address automatically** and **Obtain DNS server address automatically**.
  - Ensure that the wireless device is connected to the Wi-Fi network of the ONT or downstream router (if any).

• If you set the ONT to bridge mode, ensure that the router or terminal used for dial-up is connected and configured properly.

If the problem persists, consult your ISP.

Q3: How to reset the ONT?

A3: Method 1:

• To restore the ONT to the configurations preset by the ISP: After the ONT completes startup, press the **WPS/RST** button for 10 to 60 seconds and release it. All LED indicators will light off in a few seconds. When the **PWR** LED indicator lights solid on again, the ONT is restored to the configurations preset by the ISP.

• To restore the ONT to factory settings: After the ONT completes startup, press the **WPS/RST** button for more than 1 minute and release it. All LED indicators will light off in a few seconds. When the PWR LED indicator lights solid on again, the ONT is restored to the factory settings.

Method 2: Log in to the web UI of the ONT, navigate to **Admin > Backup/Restore** and click **Reset** on the page. You can restore the ONT to the configurations preset by the ISP.

Q4: How to change the Wi-Fi name and Wi-Fi password?

A4: Method 1: Log in to the web UI of the ONT, change the **SSID** (Wi-Fi name) and the **Pre-Shared Key** (Wi-Fi password) in **WIFI Settings** module with the quick registration function (initial registration of the ONT supported), and click **Apply Changes**.

Method 2: Log in to the web UI of the ONT, choose **WLAN** and repeat the following steps in **wlan0 (5GHz)** and **wlan1 (2.4GHz)**.

• Wi-Fi name: Choose **Basic Settings** and change the **SSID** (Wi-Fi name). Click **Apply Changes**, and click **OK** when **Change setting successfully** is shown.

• Wi-Fi password: Choose **Security**, set **Encryption** to **WPA/WPA2-PSK** (recommended) and change the **Pre-Shared Key** (Wi-Fi password). Click **Apply Changes**, and click **OK** when **Change setting successfully** is shown.

Safety Precautions

Before operating, read the operation instructions and precautions to be taken, and follow them to prevent accidents. The warning and danger items in other documents do not cover all the safety precautions that must be followed. They are only supplementary information, and the installation and maintenance personnel need to understand the basic safety precautions to be taken.

- The device is for indoor usage only.
- For wall mounting, the device is only suitable for mounting at heights ≤ 2m.
- For desktop mounting, the device must be horizontally mounted for safe use.
- Do not use the device in a place where wireless devices are not allowed.
- Please use the included power adapter.
- If the device does not have the power button, the mains plug is used as the disconnect device and shall remain readily operable. The power socket shall be installed near the device and easily accessible.
- Operating environment: Temperature: 0℃ to 45℃; Humidity: (10% - 90%) RH, non-condensing; Storage environment: Temperature: -40℃ to +70℃; Humidity: (5% - 90%) RH, non-condensing.
- Keep the device away from water, fire, high electric field, high magnetic field, and inflammable and explosive items.
- Unplug this device and disconnect all cables during lightning storms or when the device is unused for long periods.
- Do not use the power adapter if its plug or cord is damaged.
- If such phenomena as smoke, abnormal sound or smell appear when you use the device, immediately stop using it and disconnect its power supply, unplug all connected cables, and contact the after-sales service personnel.
- Disassembling or modifying the device or its accessories without authorization voids the warranty, and might cause safety hazards.

For the latest safety precautions, see **Safety and Regulatory Information** on **www.tendacn.com**.

Get support and services

https://www.tendacn.com/service/default.html

For technical specifications, user guides and more information, please visit the product page or service page on **www.tendacn.com**. Multiple languages are available.

You can see the product name and model on the product label.

RECYCLING

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.

User has the choice to give his product to a competent recycling organization or to the retailer when he buys a new electrical or electronic equipment.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

This equipment should be installed and operated with minimum distance 20cm between the device and your body.

NOTE: (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.

Declaration of Conformity

Hereby, SHENZHEN TENDA TECHNOLOGY CO., LTD. declares that the device is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:
https://www.tendacn.com/download/list-9.html

Operating Frequency/ Max Output Power	2412MHz-2472MHz/20dBm 5150MHz-5250MHz (indoor use only)/23dBm

Attention: In EU member states, EFTA countries, Northern Ireland and Great Britain, the operation in the frequency range 5150MHz - 5250MHz is only permitted indoors.

	AT	BE	BG	CH	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HR	HU	IE
	IS	IT	LI	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	UK(NI)

	UK

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V1.0 Keep for future reference.