Quick Installation Guide

HG15

Package contents

- XPON ONT x 1
- Power adapter x 1
- Ethernet cable x 1
- User manual x 1

Please read this user guide before you start with the quick setup upon the first use.

This guide instructs how to install and connect the device. For more information such as the description of symbols displayed on relevant materials, please visit www.tendacn.com.
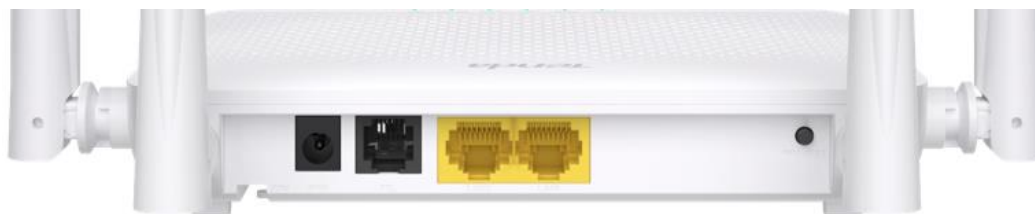
Get to know the ONT

LED indicators

LED indicator	Color	Status	Description
PWR	Green	Solid on	The ONT is powered on properly.
		Off	The ONT is powered off or not powered on properly.
PON	Green	Solid on	The ONT is registered successfully.
		Blinking	The registration is not completed (unregistered or registering).
		Off	The received optical power is lower than the optical receiver sensitivity, or no fiber cord is connected.
LOS	Red	Blinking	The received optical power is lower than the optical receiver sensitivity, or no fiber cord is connected.
		Off	The received optical power is within the optical receiver sensitivity.
LAN	Green	Solid on	The LAN port is connected properly, but no data is being transmitted over the corresponding port.
		Blinking	The LAN port is connected properly, and data is being transmitted over the corresponding port.
		Off	No Ethernet device is connected or the Ethernet device is not connected to the LAN port properly.
WLAN	Green	Solid on	The Wi-Fi network is enabled.
		Blinking	The WPS is negotiating.
		Off	The Wi-Fi network is disabled.
TEL	Green	Solid on	The ONT is registered with IMS, but no data is being transmitted.
		Blinking	The ONT is registered with IMS, and data is being transmitted.
		Off	The ONT is not registered with IMS.

Ports & Buttons

Port/Button	Description
PON	Optical fiber port. You can find it on the bottom of the ONT, which is used to connect to a fiber cord.
PWR	Power jack. Used to connect the ONT to a power source using the included power adapter.
TEL	Telephone port. Used to connect to a telephone for voice service using a telephone cable, which needs to be prepared by yourself.
LAN1/2	Gigabit LAN ports. Used to connect to such devices as routers, switches, computers or IPTV set-top boxes.

WPS/RST	WPS/Reset button.
	• **WPS:** Wi-Fi-enabled devices can connect to the Wi-Fi networks of the ONT without entering the password through WPS negotiation.
	Press the button for about 1 second to start the WPS negotiation process of the ONT. The **WLAN** 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.

-☼- Tips

This ONT supports wall mounting (two mounting holes on the bottom). The recommended parts are as follows:
- Expansion bolt: PA6*26.4mm; inner diameter: φ2.4
- Screw: Quantity: 2; Diameter: 2.5-4.0mm; head diameter: 5.0-6.5mm.

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.

Power adapter
Fiber cord
Internet

Rear panel   Bottom panel
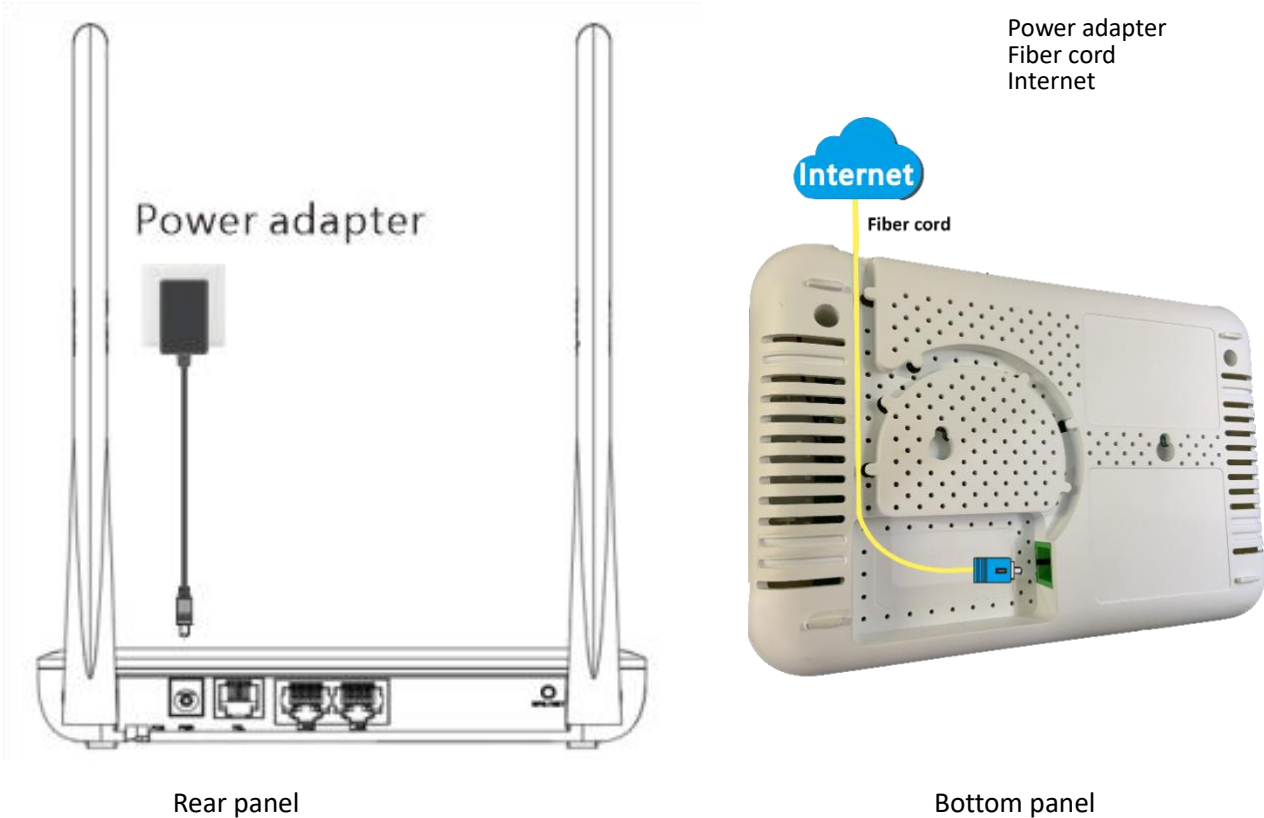
💡 Tips

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 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 Enter **192.168.1.1** in a web browser and log in to the web UI of the ONT with user permissions or administrator permissions.
- **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. The default login user name and password are both **root** for the installation and maintenance personnel only.

❸ In **GPON Settings** (or **EPON Settings**) module, register with the parameters provided by your ISP and click **Apply Changes**.

2. Configure the internet access

Router mode

Step 1: Log in to the web UI

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**.

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 need, 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 need.

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_Mask	1 ▾
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

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 **Q6** in **FAQ**.

Bridge mode

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.
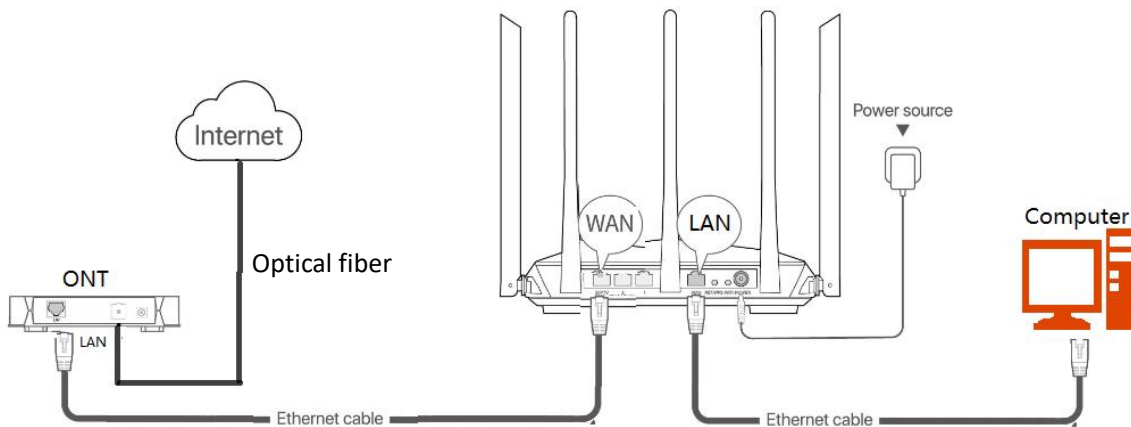
FAQ

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 **Q5** 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: Why cannot I find the Wi-Fi signal of the ONT?

A3: Ensure that the **WLAN** LED indicator lights up. If not, the Wi-Fi networks of the ONT are disabled.

Enable Wi-Fi networks: Log in to the web UI of the ONT. Choose **WLAN**, and find **Basic Settings** in either **wlan0 (5GHz)** or **wlan1 (2.4GHz).** Deselect **Disable WLAN Interface** and click **Apply Changes**.

Q4: Why cannot I find the 5 GHz Wi-Fi network of the ONT?

A4: Try the following solutions:

- If you can find other 5 GHz Wi-Fi networks, refer to **Q3** to find a solution.
- Only devices supporting 5 GHz Wi-Fi network can find and connect to the 5 GHz Wi-Fi network.

Q5: How to reset the ONT?

A5: 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.

Q6: How to change the Wi-Fi name and Wi-Fi password?

A6: 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 performing an operation, 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.

- For wall mounting, the equipment 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.

- 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.

Technical Support

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V1.0   Keep for future reference.