

Quick Installation Guide

AC1200 Dualband Wi-Fi xPON ONT

HG7

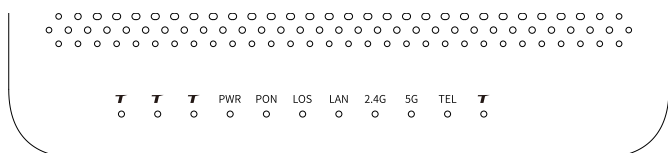
Package Contents

- xPON ONT x 1
- Power adapter x 1
- Ethernet cable x 1
- Quick installation guide x 1

For product or function details, please go to www.tendacn.com to download the user guide.

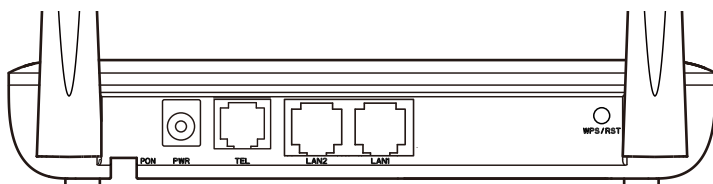
Get to know the ONT

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	There is at least one LAN port connected properly, but no data is being transmitted over the corresponding port.
		Blinking	There is at least one LAN port 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 any LAN port properly.
2.4G/5G	Green	Solid on	The 2.4 GHz/5 GHz Wi-Fi network is enabled, but no data is being transmitted wirelessly.
		Blinking slowly (0.5s)	The 2.4 GHz/5 GHz Wi-Fi network is enabled, and data is being transmitted wirelessly.
		Blinking slowly (0.25s)	The ONT is performing or pending for WPS negotiation.
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. Please use the included power adapter to connect the ONT to a power source.
TEL	Telephone port. Used to connect to a telephone for voice service using a telephone cable, which needs to be prepared by yourself.
LAN1/LAN2	Gigabit LAN ports. Used to connect to a router, switch, computer or IPTV set top box.
WPS/RST	WPS/Reset button. <ul style="list-style-type: none">• 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 1 to 3 seconds to start the WPS negotiation process of the ONT. The 2.4G and 5G LED indicator blinks quickly. Within 2 minutes, enable the WPS function on a WPS-supported device to establish a WPS connection.• Reset: Reset the ONT to factory settings. After the ONT completes startup, press the button for more than 7 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 reset.

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: $\phi 2.4$

Quantity: 2; Diameter: 2.5-4.0mm; head diameter: 5.0-6.5mm; head thickness: ≤ 2.3 mm.

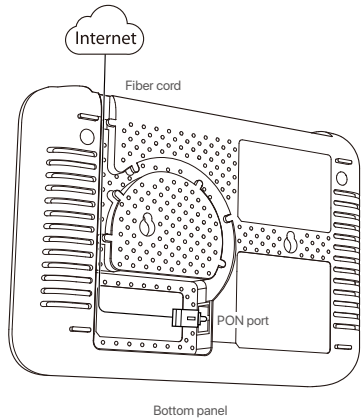
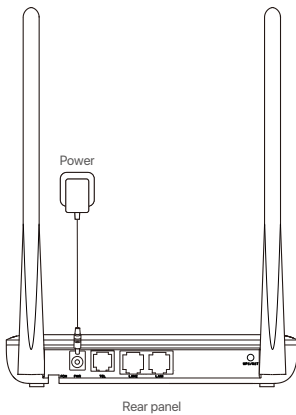
1. Connect the ONT



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. The ONT automatically adapts to the fiber access type.



2. Register the ONT

💡 Tips:

If your ISP provides any parameters for registration, choose Method2. Otherwise, choose Method 1.

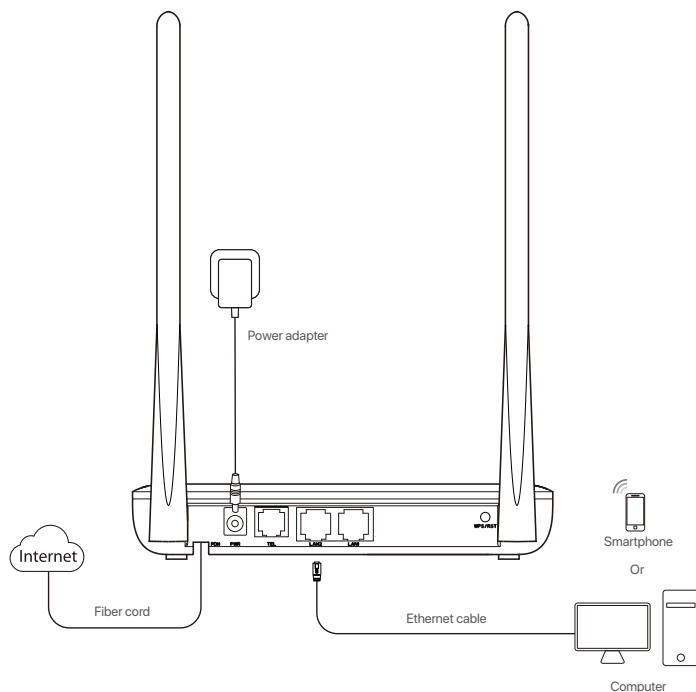
Method 1: Auto registration

After connecting the ONT, wait until the PON LED indicator lights solid on, then the ONT is registered successfully.

Method 2: Manual registration

1 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 smart phone, to the Wi-Fi network of the ONT using the **SSID** (Wi-Fi name) and **Key** (Wi-Fi password) on the bottom label.



- ### 2 Log in to the web UI by visiting **192.168.1.1** in a web browser. Default login user name and password are both **admin**.

The screenshot shows a web browser window with the address bar set to `192.168.1.1`. The page displays the Tenda logo and a login form with the following fields and buttons:

User Name:

Password:

Tips:

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

- 3 Navigate to **Admin > GPON Settings** to register with the parameters provided by your ISP, and click **Apply Changes**.

Tips:

The ONT automatically adapts to your fiber access type, and the default mode is GPON. If your access type is EPON, you may configure parameters in **Admin > EPON Settings**.

Status	LAN	WLAN	WLAN	Services	VoIP	Advance	Diagnostics	Admin	Statistics
GPON Settings This page is used to configure the parameters for your GPON network access.									
Admin									
> GPON Settings									
> Multicast VLAN									
> OMCI Information									
> Commit/Reboot									
> Backup/Restore									
> Password									
LOID:			<input type="text"/>						
LOID Password:			<input type="text"/>						
PLOAM Password:			<input type="text" value="1234567890"/>						
Serial Number			TDTCT12345678						
OMCI OLT Mode			<input type="text" value="Default Mode"/> ▾						
<input type="button" value="Apply Changes"/>									

When the PON LED indicator lights solid on, the ONT is registered successfully.

3. Configure the internet access

Tips:

- PPPoE is used for illustration here. Please 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** (default): Dial up on a router or computer.

Router mode

Step 1: Log in to the web UI

- 1 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 smart phone, to the Wi-Fi network of the ONT using the **SSID** (Wi-Fi name) and **Key** (Wi-Fi password) on the bottom label.
- 2 Start a web browser and visit **192.168.1.1**.
- 3 Enter the **User Name** and **Password**, which are both **admin** by default.
- 4 Click **Login**.

Tips:

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

Step 2: Set up a WAN connection

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

PON WAN

This page is used to configure the parameters for PONWAN

nas0_0	
Enable VLAN:	<input checked="" type="checkbox"/>
VLAN ID:	<input type="text"/>
802.1p_Mark	<input type="text"/>
Channel Mode:	PPPoE
Admin Status:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Connection Type:	INTERNET
MTU:	1492
Enable IGMP-Proxy:	<input type="checkbox"/>
Enable MLD-Proxy:	<input type="checkbox"/>
IP Protocol:	IPv4

PPP Settings:

UserName:	<input type="text"/>
Password:	<input type="text"/>
Type:	Continuous

Port Mapping:

LAN_1	<input type="checkbox"/> LAN_2
LAN_3	<input type="checkbox"/> LAN_4
WLAN0	
WLAN0-AP1	<input type="checkbox"/> WLAN0-AP2
WLAN0-AP3	<input type="checkbox"/> WLAN0-AP4

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 smart phone, to the Wi-Fi network 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 password, refer to **Q6** in **FAQ**.
-

Bridge mode

Tips:


When the ONT is set to Bridge mode, you cannot access the internet through the Wi-Fi network or the LAN ports of the ONT.

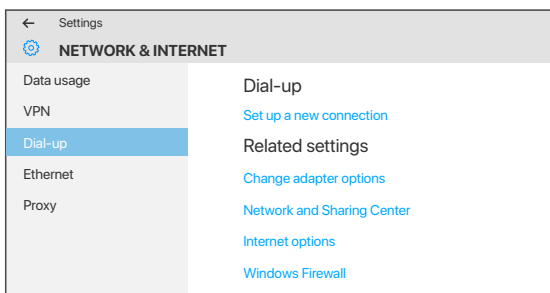
Option 1: Dial up on a router

- 1 Connect a LAN port of the ONT to the WAN port of a router using an Ethernet cable.
- 2 Connect your computer to a LAN port of the router, or connect your smartphone to its Wi-Fi network.
- 3 Set up a PPPoE connection on the router as required.

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

Option 2: Dial up on a computer (Windows 10)

- 1 Connect a LAN port of the ONT to a computer using an Ethernet cable.
- 2 Right-click  on the desktop and choose **Network Connections**.
- 3 Choose **Dial-up** and click **Set up a new connection**.



4 Click **Connect to the Internet** and click **Next**.

← Set Up a Connection or Network

Choose a connection option

- Connect to the Internet**
Set up a broadband or dial-up connection to the Internet.
- Set up a new network**
Set up a new router or access point.
- Connect to a workplace**
Set up a dial-up or VPN connection to your workplace.

Next **Cancel**

5 Click **Broadband (PPPoE)**.

← Connect to the Internet

How do you want to connect?

- Broadband (PPPoE)**
Connect using DSL or cable that requires a user name and password.

Show connection options that this computer is not set up to use

Cancel

6 Enter the PPPoE **User name** and **Password** provided by your ISP and click **Connect**.

← Connect to the Internet

Type the information from your Internet service provider (ISP)

User name:

Password:

Shown characters

Remember this password

Connection name:

Allow other people to use this connection
This option allows anyone with access to this computer to use this connection.

[I don't have an ISP](#)

Connect **Cancel**

Wait a few seconds until the dial-up succeeds, then you can access the internet on the computer.

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.
- If you use a wireless device, such as a smart phone, to configure the ONT:
 - Ensure that your smart phone 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 smart phone 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.
 - Ensure that your computer is set to obtain an IP address automatically.
 - Ensure that the IP address of your computer is at the same network segment as the ONT.
 - Use another computer and try again.
- Reset the ONT (after the ONT completes startup, press the **WPS/RST** button down for more than 7 seconds and release it. All LED indicators light off in a few seconds. When the **PWR** LED indicator lights solid on again, the ONT is reset) 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 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.
 - 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 the bridge mode:
 - Ensure that the router or computer used for dial up is connected and configured properly.
 - Note that **Internet** access is not available through the LAN ports or the Wi-Fi network of the

If the problem persists, consult your ISP.

Q3: I cannot find the Wi-Fi signal of the ONT on my wireless device. What should I do?

A3: Ensure that the **2.4G** or **5G** LED indicators light 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 **wlan1 (5GHz)** or **wlan1 (2.4GHz)**. Deselect **Disable WLAN Interface** and click **Apply Changes**.

Q4: I cannot find the 5 GHz Wi-Fi signal of the ONT on my wireless device. What should I do?

A4: Try the following solutions:

- Check whether your wireless device supports 5 GHz Wi-Fi network. Only devices supporting 5 GHz network can find and connect to the 5 GHz Wi-Fi network.
- If you can find other 5GHz Wi-Fi networks, refer to **Q3**.

Q5: How to reset the ONT?

A5: Method1:After the ONT completes startup, press the **WPS/RST** button for more than 7 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 reset.

Method2: Log in to the web UI of the ONT, choose **Admin > Backup/Restore** and click **Reset** on the page.

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

A6: 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.