Tenda

Quick Installation Guide
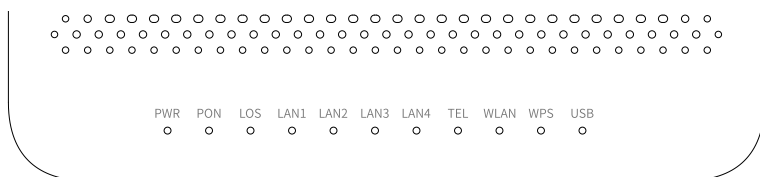
N300 Wi-Fi xPON ONT

HG6

Package Contents

- xPON ONT x 1
- Power adapter x 1
- Ethernet cable (RJ45) x 1
- Telephone cable (RJ11) x 1
- User manual x 1

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

Get to know the ONT

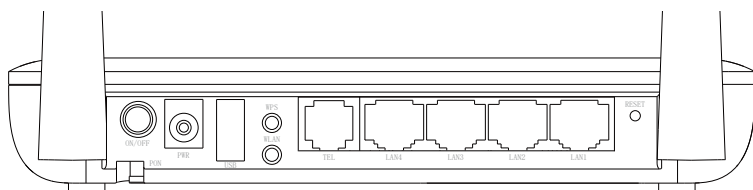## LED indicators

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.
		Off	The received optical power is within the optical receiver sensitivity.
LAN1/2/3/4	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.
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.
WLAN	Green	Solid on	The Wi-Fi function is enabled, but no data is being transmitted wirelessly.
		Blinking	The Wi-Fi function is enabled, and data is being transmitted wirelessly.
		Off	The Wi-Fi function is disabled.
WPS	Green	Solid on for 2 minutes	A WPS connection is established.
		Blinking	The ONT is performing WPS negotiation.
		Off	The ONT is not performing WPS negotiation.
USB	Green	Solid on	The USB device is connected to the USB port properly, but no data is being transmitted over the port.
		Blinking	The USB device is connected to the USB port properly, and data is being transmitted over the port.
		Off	The USB port is disconnected or not connected properly.

Ports & Buttons

Port/Button	Description
ON/OFF	Power on/off button. Press the button to turn on or off the ONT.
PON	Optical fiber port. Used to connect to a fiber cord.
PWR	Power jack. Please use the included power adapter to connect the ONT to a power source.
USB	USB 2.0 port. Used to connect to a USB storage for resource sharing.
WPS	WPS button. Press the button to start the WPS negotiation process of the ONT. The WPS LED indicator blinks. Within 2 minutes, enable the WPS function on a WPS-supported device to establish a WPS connection.
WLAN	Wi-Fi function 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.
LAN1/2/3/4	One gigabit (LAN4) and three fast LAN ports. Used to connect to a router, switch, computer or IPTV set-top box.
RESET	Reset button. After the ONT completes startup, use an object with a spike to hold down the button for more than 10 seconds and release it. All LED indicators light off in a few seconds. When the **POWER** LED indicator lights solid on again, the ONT is restored to the configurations preset by the ISP.

Tips:

- This ONT supports wall mounting (two mounting holes on the bottom). The recommended parts are as follows:
  Expansion bolt: PA6*26.4 mm; inner diameter: 2.4 mm
  Screw: Quantity: 2; Diameter: 3.0-4.0 mm; head diameter: 5.0-6.5 mm; head thickness: ≤2.0 mm.
- This ONT is only suitable for mounting at heights ≤ 2m.
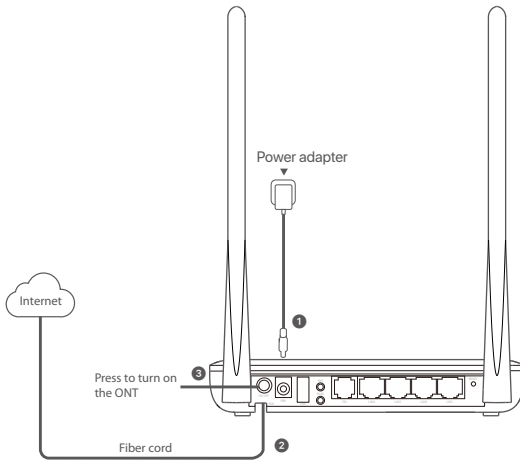
1. Connect and register the ONT

⚠ **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.

💡 Tips:

If ISP offers you parameters, you need to use them to manually register the ONT.

Method:
❶ Use an Ethernet cable to connect a LAN port of the ONT to a computer, or connect your 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 (default login user name and password are both **admin**).
❸ Navigate to **Admin** > **GPON Settings** (or **EPON Settings**) and enter the parameters provided by ISP.

2. Configure the internet access
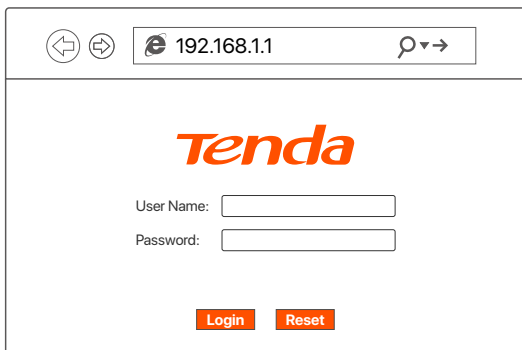
Router mode

Option 1 Access internet over PPPoE

Step 1: Log in to the web UI
❶ Connect a LAN port of the ONT to a computer using an Ethernet cable, or connect your 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** (**admin** for both by default).
❹ Click **Login**.

Step 2: Set up a WAN connection
❶ Choose **WAN** > **PON WAN**.
❷ Tick **Enable VLAN**.
❸ Enter the **VLAN ID** provided by ISP.
❹ Set **Channel Mode** to **PPPoE**.
❺ Set **Connection Type** to **INTERNET**.
❻ Enter the PPPoE **UserName** and **Password** provided by ISP.
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:	☑
VLAN ID:	
802.1p_Mark	0 ▼
Multicast Vlan ID: [1-4094]	
Channel Mode:	PPPoE ▼
Admin Status:	◉ Enable ○ Disable
Connection Type:	INTERNET ▼
MTU:	1492
Enable IGMP-Proxy:	☐
Enable MLD-Proxy:	☐
IP Protocol:	IPv4 ▼

PPP Settings:

UserName:	
Password:	
Type:	Continuous ▼
AC-Name	
Service-Name:	

Port Mapping:

☐ LAN_1	☐ LAN_2
☐ LAN_3	☐ LAN_4
☐ WLAN0	
☐ WLAN0-AP1	☐ WLAN0-AP2
☐ WLAN0-AP3	☐ WLAN0-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 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 Wi-Fi password, refer to **Q5** in **FAQ**.

Option 2 Access internet over DHCP

Step 1: Log in to the web UI

Refer to **Step 1**: **Log in to the web UI** in **Option 1 Access internet over PPPoE** to log in to the web UI of the ONT.

Step 2: Set up a WAN connection

❶ Choose **WAN** > **PON WAN**.
❷ Tick **Enable VLAN**.
❸ Enter the **VLAN ID** provided by ISP.
❹ Set **Channel Mode** to **IPoE**.
❺ Set **Connection Type** to **INTERNET**.
❻ Click **Apply Changes**.
❼ 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:	☑
VLAN ID:	
802.1p_Mark	0 ▼
Multicast Vlan ID: [1-4094]	
Channel Mode:	IPoE ▼
Admin Status:	◉ Enable ○ Disable
Connection Type:	INTERNET ▼
MTU:	1500
Enable IGMP-Proxy:	☐
Enable MLD-Proxy:	☐
IP Protocol:	IPv4 ▼

WAN IP Settings:

Type:	○ Fixed IP ◉ DHCP
Local IP Address	0.0.0.0
Remote IP Address	0.0.0.0
Subnet Mask	255.255.255.0
IP Unnumbered	☐
Request DNS	◉ Enable ○ Disable
Primary DNS Server	
Secondary DNS Server	

Port Mapping:

☐ LAN_1	☐ LAN_2
☐ LAN_3	☐ LAN_4
☐ WLAN0	
☐ WLAN0-AP1	☐ WLAN0-AP2
☐ WLAN0-AP3	☐ WLAN0-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 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 Wi-Fi password, refer to **Q5** in **FAQ**.
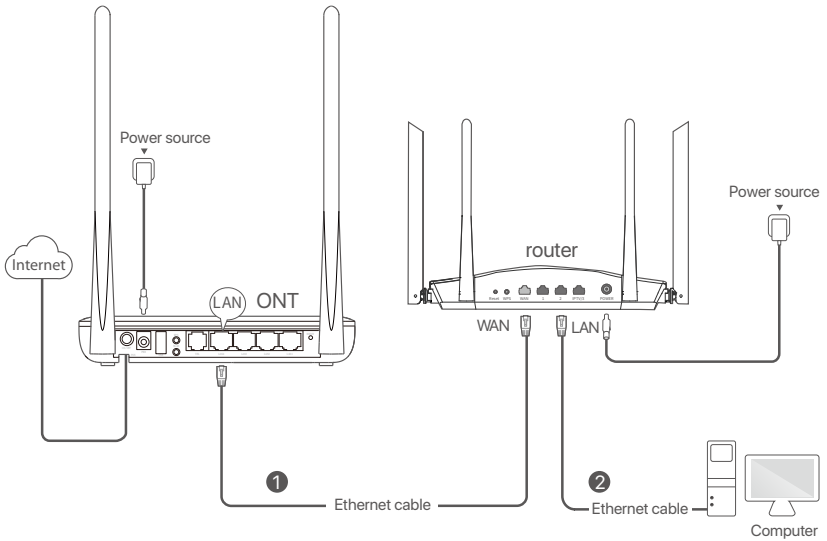

Bridge mode

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 the 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**.
  - 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 by following the operations below and try again.
  Resetting operation: After the ONT completes startup, use an object with a spike to hold down the **RESET** button for 10 or more 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.

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 ISP or verify the parameters for registration are correct.
- Ensure that ISP supports self-purchased PON devices 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.
  If the problem persists, consult ISP.

Q3: I cannot find the Wi-Fi signal of the ONT. What should I do?
A3: Ensure that the **WLAN** LED indicator lights up. If not, press the **WLAN** button of the ONT. The Wi-Fi network of the ONT is enabled when the **WLAN** LED indicator lights up. Then try again.

Q4: How to reset the ONT?

A4: Method1: After the ONT completes startup, use an object with a spike to hold down the **RESET** button for 10 or more 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.

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

Q5: How to change the Wi-Fi name and Wi-Fi password?

A5: Log in to the web UI of the ONT, and choose **WLAN**:

- 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 **WPA2 Mixed** (recommended) and change the **Pre-Shared Key** (Wi-Fi password). Click **Apply Changes**, and click **OK** when **Change setting successfully** is shown.

Technical Support

Shenzhen Tenda Technology Co., Ltd.
Floor 6-8, Tower E3, No.1001, Zhongshanyuan Road, Nanshan District,
Shenzhen, China. 518052
USA hotline: 1-800-570-5892
Toll Free: 7 x 24 hours
Hong Kong hotline: 00852-81931998
Global hotline: +86 755-2765 7180 (China Time Zone)
Website: www.tendacn.com
E-mail: support@tenda.com.cn