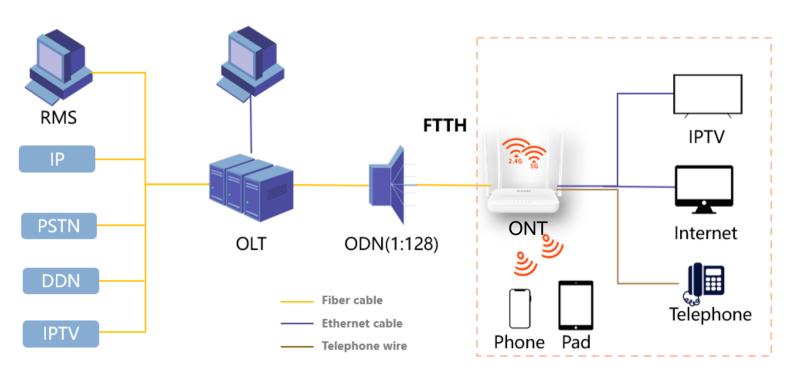# Tenda

All for better networking.

# HG15

AX1500 Wi-Fi6 VoIP XPON ONT

www.tendacn.com

# Product Features

## Product Description

Tenda HG15 is a gigabit passive optical network XPON (EPON and GPON) terminal, which provides perfect terminal solutions and future oriented service support capabilities for FTTH deployment, with high cost performance. The device uses the latest 802.11ax Wi-Fi 6 technology standard, is compatible with 802.11ac/b/g/n and supports a connection rate of 1500Mbps. It supports Internet/IPTV/VoIP and other services, features large transmission capacity, fast speeds and high reliability, and is fully compliant with ITU-T G.984. x and other technical regulations.

## Application Scenario

# Tenda

## Product Features

### New Wi-Fi6 experience

HG15 supports the current generation of Wi-Fi 6 technology, dual-band concurrent rate up to 1500Mbps (2.4GHz: 300Mbps, 5GHz: 1201Mbps), which is 38% faster than the peak speed of the AC1200. Simply enjoy an amazing internet experience with Wi-Fi 6.

### 4*6dBi high-gain antenna, broader coverage, faster network speed

Watch videos, immerse yourself in VR, play games with friends, watch live streams.Surf at your own pace without fear of lag.

### Easy Preset, Pre-Configuration

Reduce installation costs: customise default configurations for batch deployment to devices.
Reduce after-sales costs: after operational errors, it can be reset to ISP default configuration by Reset button.

### Good OLT compatibility

Tenda lab has conducted several compatibility tests on global mainstream OLT brands, such as Huawei, ZTE, Fiberhome, NOKIA, CALIX, etc., to ensure that ONT is perfectly adapted to the ISP local environment.

# Tenda

## Hardware Features

| Parameter | Nominal |
|---|---|
| Interface | 1*PON Port + 2*GE（RJ45）+ 1*TEL（RJ11） |
| LED | PWR、PON、LOS、LAN、WLAN、TEL |
| Button | 1*RST/WPS Button |
| Antenna | 4*6 dBi Antenna |
| Dimension | 220.8×141.9×31mm（L×W×H) |
| Net weight | 280g |
| External Power Supply | DC 12V1.5A |
| Power Consumption | ≤18w |
| Installation style | Support desktop, wall mount or put inside of information box. |
| Operating Temperature | 0°c ~ 45°c |
| Authentication | CE、FCC、RoHS、Anatel |

# Tenda
## Specification

## Interface of device

| Port Type | Function |
|---|---|
| FIBRA | Connect PON port with internet by SC type(APC or UPC), single mode optical fiber cable |
| LAN 1/2 | RJ45 Port connects to local internet, 2 GE port |
| TEL | Connect the telephone with TEL port by telephone wire |
| RST/WPS Button | WPS: Press the button for 0 to 1 seconds to perform a WPS wireless encrypted connection;<br>RST: Press 10s-60s to restore the default configuration of the Preset, and 60s to restore the factory configuration of the Tenda. |
| POWER | Connect with power adapter, DC 12V |

## Indicators of device

| Port Type | status | Description |
|---|---|---|
| PWR | Light on | ONT power supply normally |
| | Light off | ONT no power supply |
| PON | Light on | ONT gateway registered |
| | Blink | ONT manage to link |
| | Light off | ONT not registered |
| LOS | Blink | Received optical power is lower than the sensitivity of the optical receiver. |
| | Light off | Received optical power is normal |
| LAN | Light on | Network port linked, but no data transmitting |
| | Blink | Network port data pass |
| | Light off | ONT no power supply or internet cable unlink |
| WLAN | Light on | WiFi turn on |
| | Light off | WiFi turn off |
| | Blink | WPS is negotiating |
| TEL | Light on | Registered to the SIP server and can be used |
| | Light off | It is not registered to the SIP server |

# Tenda
# Specification

## PON Features

| Port Type | Function |
|---|---|
| GPON Standards | ITU G.984.1, ITU G.984.2, ITU G.984.3, ITU G.984.4 |
| EPON Standards | IEEE802.3ah |
| IEEE Standards | IEEE 802, 802.1Q, 802.10, IEEE 802.11, 802.3U, 802.3Z |
| Connector style | SC/PC （APC or UPC） |
| PON quantity | 1 |
| Wavelength | Transmit at 1310nm, Receive at 1490nm |
| Optical Mode | Class B+ |
| Bandwidth | Upstream 1.25Gbps Max, Downstream 2.5Gbps Max |
| TX Power | 0.5~5dBm |
| RX Power | -28~-8dBm |
| Transmission Distance | 20km Max |

## Wi-Fi Features

| Port Type | Function |
|---|---|
| Wireless Standards | IEEE 802.11 a/b/g/n/ac/ax |
| Wireless Rate | 2.4GHz:300Mbps;<br>  5GHz:1201Mbps |
| Bandwidth | 2.4G :20M/40M,<br>  5G: 20M/40M/80M |
| Frequency | 2.4G: 2.412-2.472GHz<br>  5G: 5.170-5.250GHz; 5.735-5.815GHz; 5.815-5.835GHz |
| Channel Number | 2.4G: 13<br>  5G: 9 |
| Transmit Power | 2.4G: <25.5 dBm(EIRP); 5G: <22.5dBm(EIRP) |
| Wireless Functions | Enable/Disable Wireless Radio, WDS Bridge, WMM, Wireless Statistics, Beamforming,OFDMA,  MU-MIMO |
| Wireless Security | 64/128-bit WEP, WPA / WPA2/ WPA3 |
| SSIDs | Main SSID at 2.4Ghz and 5GHz<br>4 Guest SSIDs Both At 2.4GHz and 5GHz |
| Max Terminal Linked | 32 at both 2.4GHz and 5GHz |

## POTS Specifications

- support SIP voice protocol

- support H.248 voice protocol

- SIP protocol: ISP provide the port number of the main SIP proxy server and terminal VOIP

- Value range is 1-65535, system default value is 5060

- Port ringing current voltage: 50±10VAC，30±10H

- Port type POTS(VOIP)

- Support G.711 A-Law/u-Law,G729A/B,G.723.1-5.3/6.3,G.726.etc.voice coding/compressed technology

## Special function

- Support TR069,NAT,DMZ,DNS features

- Support Multiple SSID

- Support Multiple VLAN

- Support 802.11ax(WIFI6)

- Support MU-MIMO

- Support QOS

- Support Preset

- Support Easy Mesh and tenda xmesh

- Support IPV6 ,PPPoE, DHCP and Static IP configuration for WAN Interface

- Support IP, MAC filtering, DDOS，Firewall Functionality in routed mode

- Support for xPON, adaptive EPON or GPON OLT on the network