



# Navigator

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*It is Time to Redefine  
High Quality Network*

# “For a better connected world”

## AC1200 GPON/EPON ONT with Mesh

Smart device, an intelligent router-type ONT



**SM164242-GHDUHR-T21**

## Device Parameters

<b>Dimensions (L x W x H)</b>	235.2mm x 158mm x 30mm (without external antenna and pads)
<b>Weight</b>	300g
<b>Operating temperature</b>	0°C - 50°C
<b>Operating humidity</b>	10% to 90% (non-condensing)
<b>Power adapter input</b>	100-240V AC, 50-60Hz
<b>System power supply</b>	11-14V DC, 1.5A
<b>Static power consumption</b>	2 W
<b>Maximum power consumption</b>	7 W
<b>NNI</b>	GPON/EPON
<b>UNI</b>	2POTS + 4GE + 2.4G/5G Wi-Fi + 1USB
<b>Indicators</b>	POWER/LAN/TEL/PON/LOS/WIFI/WPS/USB/ CATV
<b>Installation mode</b>	On the desk, or on the wall
<b>Compliance certification</b>	CE/WiFi/Anatel

## Interface Parameters

<b>GPON/EPON Port</b>	<ul style="list-style-type: none"> <li>GPON: FSAN G.984.2 standard, Class B+</li> <li>EPON: 1000BASE-PX20+ Symmetric, CTC2.1, CTC3.0</li> <li>GPON: 2.488/1.244Gbps Downstream/Upstream</li> <li>EPON: 1.25Gbps Downstream/Upstream</li> <li>Wavelength: Transmit 1310nm, Receiver 1490nm</li> <li>Receiver Sensitivity: GPON: -28dBm; EPON: -27dBm</li> <li>Transmit Optical Power: GPON: 0.5~5dBm; EPON: 0~4dBm</li> <li>SC/PC single-mode fiber</li> <li>Saturation Optical Power: GPON: -8dBm; EPON: -3dBm</li> <li>Flexible mapping between GEM Port and TCONT</li> <li>GPON: Consistent with the SN or password authentication defined in G.984.3</li> <li>EPON: Consistent with the MAC or LOID authentication defined in IEEE 802.3ah</li> <li>Bi-directional FEC</li> <li>SR-DBA and NSR-DBA</li> <li>Type B (single-homing &amp; dual-homing)</li> </ul>
<b>Ethernet Port</b>	<ul style="list-style-type: none"> <li>Ethernet port-based VLAN tags and tag removal</li> <li>1:1 VLAN, N:1 VLAN, or VLAN transparent transmission</li> <li>QinQ VLAN</li> <li>Limit on the number of learned MAC addresses</li> <li>Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s</li> <li>Full/half duplex mode, auto MDI/MDI-X</li> </ul>
<b>POTS Port (Optional)</b>	<ul style="list-style-type: none"> <li>Maximum REN: 4</li> <li>G.711A/μ, G.729a/b and G.722 encoding/decoding</li> <li>T.30/T.38/G.711 fax mode</li> <li>DTMF, Emergency calls (with the SIP protocol)</li> </ul>
<b>USB Port</b>	<ul style="list-style-type: none"> <li>USB 2.0 interface</li> <li>Transmission Rate: 480Mbps</li> <li>FTP-based network storage</li> <li>File/Print sharing based on SAMBA</li> <li>DLNA function</li> </ul>
<b>WLAN</b>	<ul style="list-style-type: none"> <li>Comply with IEEE 802.11a/b/g/n/ac protocol standard, support 2.4GHz and 5GHz</li> <li>5dBi antenna gain</li> <li>Maximum ideal rate up to 1.2Gbps</li> <li>2.4GHz supports 2*2 MIMO technology</li> <li>5GHz supports 2*2 MIMO technology</li> <li>WMM/Multiple SSIDs/WPS</li> </ul>
<b>CATV (Optional)</b>	<ul style="list-style-type: none"> <li>Wavelength: 1550nm</li> <li>RF frequency: 45MHz~1000MHz</li> <li>RF output impedance: 75Ω</li> </ul>

## Product Function

### Smart O&M

- Rogue ONU detection
- Loop detection
- Dying-Gas detection and reporting
- Compatible with FiberHome, ZTE and HUAWEI OLT

### Basic Service

- Bridge and routing mode access Internet
- IPTV service configuration
- Voice service configuration

### Wireless

- IEEE802.11a/b/g/n/ac standard, 2.4G and 5G
- Maximum 8 SSID
- Hide SSID
- Support wider RF bandwidth, up to 80MHz@5G, 40MHz@2.4G
- Support higher 256-QAM modulation mode
- Support MIMO-OFDM encoding mode
- Support wireless security of 64/128 bit WEP, 802.1x, WPA and WPA2

### Layer 3 function

- Port forwarding
- PPPoE/Static IP/DHCP
- NAT/NAPT
- ALG, UPnP
- DDNS/DNS server/DNS client
- IPv6/IPv4 dual stack, and DS-Lite
- Static/Default routes
- Multiple services on one WAN port

### QoS

- Ethernet port rate limitation
- Priority tag
- SP/WRR/SP+WRR queue schedule
- Traffic shaping
- Congestion avoidance
- Broadcast packet rate limitation

### Power Saving

- Indicator power saving
- Meet GPON energy saving of G987.3 protocol

### Security

- Firewall
- Filtering based on MAC/IP/URL addresses
- Access control

### Common O&M

- Automatic registration / link detection / remote upgrade
- OMCI /WEB/TR069 management
- Support backup and restore configuration
- VLAN transparent/tag/untag
- MAC address learning, support 4096 MAC table
- Support PreSet function
- Support timer reboot

### Multicast

- Multicast version 2.0
- Multicast VLAN configuration
- Multicast transparent/snooping/proxy