

# A Smarter Way for Your Broadband Life

Huawei Q2, an intelligent routing-type ONT

Smart  
service

Smart  
interconnection



Smart O&M

## ○ Device Parameters

Dimensions (L x W x H)	265 mm x 176 mm x 82 mm
Weight	About 1500 g
Operating temperature	0
Operating humidity	5% RH to 95% RH (non-condensing) °C to +40°C
Power adapter input	100–240 V AC, 50/60 Hz
System power supply	11–14 V DC, 2 A
Static power consumption	8 W
Maximum power consumption	20.5 W
Ports	2POTS + 4GE + 2.4G/5G Wi-Fi + 1USB
Indicators	POWER/PON/LOS/TEL/LAN/WLAN/ WPS/USB

## ○ Interface Parameters

<b>GPON Port</b>	<ul style="list-style-type: none"><li>• Class B+</li><li>• Receiver sensitivity: -27 dBm</li><li>• Wavelengths: US 1310 nm, DS 1490 nm</li><li>• WBF</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>• Bi-directional FEC</li><li>• SR-DBA and NSR-DBA</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>• MAC address learning</li></ul>
<b>POTS Port</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</li><li>• Emergency calls (with the SIP protocol)</li></ul>
<b>USB Port</b>	<ul style="list-style-type: none"><li>• USB2.0</li><li>• FTP-based network storage</li><li>• File/Print sharing based on SAMBA</li><li>• DLNA DMS/UPnP AV (media server)</li></ul>
<b>WLAN</b>	<ul style="list-style-type: none"><li>• IEEE 802.11 b/g/n (2.4G)</li><li>• IEEE 802.11 a/n/ac (5G)</li><li>• 3 × 3 MIMO</li><li>• Antenna gain: 2 dBi</li><li>• WMM</li><li>• Multiple SSIDs</li><li>• WPS</li><li>• 2.4G/5G concurrent</li><li>• Air interface rate: 450 Mbit/s (2.4G); 1300 Mbit/s (5G)</li></ul>

## ○ Product Function

### Smart interconnection

- Smart Wi-Fi coverage
- SIP/H.248 auto-negotiation
- Any port any service
- Parental control
- L2/L3(IPv4) forwarding: 1G uplink, 2G downlink

### Smart service

- Smart Wi-Fi sharing:  
Portal/802.1x authentication  
SoftGRE-based sharing
- Association of one account with two POTS ports

### Smart O&M

- IPTV video quality diagnosis
- Variable-length OMCI messages
- Active/Passive rogue ONT detection and isolation
- Call emulation, and circuit test and loop-line test
- PPPoE/DHCP simulation testing
- WLAN emulation

### Layer 3 Features

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

### Multicast

- IGMP v2/v3 proxy/snooping
- MLD v1/v2 snooping
- Multicast services through Wi-Fi

### QoS

- Ethernet port rate limitation
- 802.1p priority
- SP/WRR/SP+WRR
- Broadcast packet rate limitation

### Security

- SPI firewall
- Filtering based on MAC/IP/URL addresses

### Common O&M

- OMCI/Web UI/TR069
- Dual-system software backup and rollback

### Power Saving

- Indicator power saving
- Scheduled Wi-Fi shutdown

