

# A Smarter Way for Your Broadband Life

Huawei HG8546M, an intelligent routing-type ONT

Smart  
service

Smart  
interconnection

Smart O&M



## ○ Device Parameters

Dimensions (HxWxD)	176mm x 138mm x 28mm
Weight	< 500g
Operating temperature	0°C ~ +40°C
Operating humidity	5% RH ~ 95% RH , (non-condensing)
Power adapter input	150V ~ 264V AC , 50Hz ~ 60Hz
System power supply	11V ~ 14V DC , 1A
Static power consumption	4.5W
Maximum power consumption	12W
Ports	1POTS + 4FE + Wi-Fi + USB
Indicators	POWER/PON/LOS/LAN/TEL/USB/WLAN/WPS

## ○ Interface Parameters

### GPON Port

- Class B+
- Receiver sensitivity: -27dBm
- Wavelengths: US 1310nm, DS 1490nm
- WBF
- Flexible mapping between GEM Port and TCONT
- GPON: consistent with the SN or password authentication defined in G.984.3
- Bi-directional FEC
- SR-DBA and NSR-DBA

### Ethernet Port

- Ethernet port-based VLAN tags and tag removal
- 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission
- QinQ VLAN
- Limit on the number of learned MAC addresses
- MAC address learning

### POTS Port

- Maximum REN: 4
- G.711A/μ, G.729a/b, and G.722 encoding/decoding
- T.30/T.38/G.711 fax mode
- DTMF
- Emergency calls (with the SIP protocol)

### WLAN

- IEEE 802.11 b/g/n
- 2 x 2 MIMO
- Antenna gain: 2 dBi
- WMM
- Multiple SSIDs
- WPS

### USB Port

- USB2.0
- FTP-based network storage

## ○ Product Function

### Smart Interconnection

- Smart Wi-Fi coverage (V300R015C10)
- SIP/H.248 auto-negotiation
- Any port any service
- Parental control (V300R015C00)

### Smart Service

- Smart Wi-Fi sharing:  
Portal, 802.1x authentication (V300R015C10)  
Soft GRE-based sharing (V300R015C10)
- One account

### Smart O&M

- IPTV video quality diagnosis (V300R015C10)
- 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 snooping
- IGMP v2 proxy
- IGMP v3 proxy ( V300R015C00 )
- 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

- Dynamic power saving
- Indicator power saving
- Scheduled Wi-Fi shutdown (V300R015C00)