

A Smarter Way for Your Broadband Life

Huawei EG8247Q, an intelligent routing-type ONT

Smart
service

Smart
interconnection



Smart O&M

Device Parameters

Dimensions (Hx W x D)	32 mm x 219 mm x 159 mm (without external antenna and pads)
Weight	About 400 g
Operating temperature	0°C to +40°C
Operating humidity	5% RH to 95% RH (non-condensing)
Power adapter input	100-240 V AC, 50/60 Hz
System power supply	11-14 V DC, 2 A
Static power consumption	6.6 W
Max. power consumption	24 W
NNI	GPON
UNI	2POTS + 4GE + 2.4G/5G Wi-Fi + 2USB+1CATV
Optical connector	SC/APC
Indicators	POWER/PON/LOS/LAN/TEL/USB/WLAN/WPS/CATV
Installation mode	On the desk, or on the wall
Compliance certification	CE/WiFi

Interface Parameters

GPON Port

- Class B+
- Receiver sensitivity: -27 dBm
- Overload optical power: -8 dBm
- Wavelengths: US 1310 nm, DS 1490 nm
- Wavelength blocking filter (WBF) of G.984.5
- Flexible mapping between GEM Port and TCONT
- consistent with the SN or password authentication defined in G.984.3
- Bi-directional FEC
- SR-DBA and NSR-DBA
- Type B (single-homing&dual-homing)

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
- Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s

CATV Port

- Frequency Range 54 MHz to 870 MHz
- Output resistance 75 ohms
- Received average optical power: -8dBm to +2dBm
- RF output power: ≥17dBmV/Ch
(With RF source analog channel power input = 20dBmV/ch, and 40 analog / 63 digital channels (4.3% OMI analog, 2.15 % digital))

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)

USB Port

- USB2.0
- FTP-based network storage
- File/Print sharing based on SAMBA
- DLNA function

WLAN

- IEEE 802.11 b/g/n (2.4G)
- IEEE 802.11 a/n/ac (5G)
- 3 × 3 MIMO (2.4G/5G)
- Antenna gain: 2 dBi
- WMM/Multiple SSIDs/WPS
- 2.4G/5G concurrent
- Air interface rate:450 Mbit/s (2.4G);1300 Mbit/s (5G)

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

- Scheduled Wi-Fi shutdown
- 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
- eMDI
- Rogue ONT detection and isolation from the OLT
- Call emulation, and circuit test and loop-line test
- PPPoE/DHCP simulation testing
- WLAN emulation
- eSight management

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

Humanized design

- Support one button to turn off all LEDs

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
- Variable-length OMCI messages
- Dual-system software backup and rollback

Power Saving

- Indicator power saving
- COC V5