

# A Smarter Way for Your Broadband Life

Huawei EG8145V5, an intelligent routing-type ONT

Smart  
service

Smart  
interconnection



Smart O&M

## Device Parameters

Dimensions (L x W x H)	173 mm x 120 mm x 30 mm (without external antenna and pads)
Weight	About 250 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, 1.5 A
Static power consumption	5.3 W
Max. power consumption	18 W
NNI	GPON
UNI	1POTS+4GE+2.4G/5G Wi-Fi+1USB
Optical connector	SC/UPC, SC/APC
Indicators	POWER/PON/LOS/LAN1/LAN2/LAN3/LAN4/ TEL/USB/WLAN/WPS

## 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
- GPON: consistent with the SN or password authentication defined in G.984.3
- Bi-directional FEC
- SR-DBA and NSR-DBA
- Type B

### 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

### 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)
- 2 × 2 MIMO (2.4G&5G)
- Antenna gain: 5 dBi
- WMM/Multiple SSIDs/WPS
- 2.4G&5G concurrent
- Air interface rate:  
300 Mbit/s (2.4G)  
867 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

### Smart O&M

- IPTV video quality diagnosis
- eMDI
- 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, DS-Lite and IPv6 SPI
- 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/OAM/Web UI/TR069
- Variable-length OMCI messages
- Dual-system software backup and rollback

### Power Saving

- Indicator power saving
- COC V5