

A Smarter Way for Your Broadband Life

Huawei EG8141A5, an intelligent routing-type ONT

Smart
service

Smart
interconnection

Smart O&M



Device Parameters

Dimensions (H x W x D)	30 mm x 152 mm x 105 mm (without an external antenna and pads)
Weight	About 180 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 A
Static power consumption	3.1 W
Maximum power consumption	7.15 W
NNI	GPON
UNI	1POTS + 1GE + 3 FE + 2.4G Wi-Fi
Optical Connector	SC/APC
Indicators	POWER/PON/LOS/LAN/TEL/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

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
- GE: Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s
- FE: Auto-adaptive 10 Mbit/s, 100 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)

WLAN

- IEEE 802.11 b/g/n
- 2 x 2 MIMO
- Antenna gain: 5 dBi
- WMM
- Multiple SSIDs
- WPS
- Air interface rate: 300 Mbps

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, 1.3G downlink

Smart service

- Smart Wi-Fi sharing: Portal/802.1x authentication
SoftGRE-based sharing
- Scheduled Wi-Fi shutdown

Smart O&M

- IPTV video quality diagnosis
- Rogue ONT detection and isolation from the OLT
- 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

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