EG8145B7N-50 Datasheet-draft

Huawei intelligent GPON and Wi-Fi 7 routing-type ONT

Note: This document is for project promotion only. Specifications may change in the formal release. The actual values prevail.

Overview

The Huawei OptiXstar EG8145B7N-50 is a GPON and Wi-Fi 7 routing-type ONT. It uses the GPON and Wi-Fi 7 technologies to implement ultra-broadband access, high performance and wide coverage for users. The high forwarding performance ensures the user experience of voice and data services, and provides customers with an ideal all-optical access solution and future-oriented service support capability.

It provides one 2.5GE port, three GE ports, one POTS port, one USB port and 2.4GHz&5GHz Wi-Fi 7 function.

- Next generation Wi-Fi 7 technology
- Smart service
- Smart interconnection
- Smart O&M

NOTE

The appearance shown in this document may be different from the actual appearance of the product. The actual product prevails.

Device Parameters

Dimensions (H x W x D) (without external antenna	40 mm x 150 mm x 108 mm (TBD)	**Memory**	128 MB Flash, 256 MB RAM

and pads)			
Operating temperature	0°C to 40°C	**NNI**	GPON
Operating humidity	5% RH to 95% RH (non-condensing)	**UNI**	1x2.5GE+3xGE+1xPOTS+1 xUSB+2.4GHz/5GHz Wi-Fi 7
Power adapter input	100–240 V AC, 50/60 Hz	**Optical connector**	SC/APC
System power supply	12 V DC, 1.5 A (TBD)	**Indicators**	Power/PON/LOS/LAN1/LAN 2/LAN3/2.5GLAN/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

POTS port

- Maximum ringer equivalence number (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/ax/be (2.4GHz)
- IEEE 802.11 a/n/ac/ax/be (5GHz)
- 2×2 MIMO (2.4GHz&5GHz)
- Antenna gain: 5 dBi
- Air interface rate: 688 Mbit/s (2.4GHz), 2882 Mbit/s (5GHz)
- 4096 QAM
- 160 MHz frequency bandwidth
- OFDMA
- MU-MIMO
- DCM
- BSS Coloring
- Beamforming
- Band steering
- WPA3
- MLO (Multi-Link Operation)
- Multi-RU
- WMM/Multiple SSIDs/WPS

Ethernet port

- 1x2.5GE+3xGE
- 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 port supports auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s
- 2.5GE port supports auto-adaptive 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s or 2500 Mbit/s

Product Function

Smart interconnection	Smart service	Smart O&M
• Smart Wi-Fi coverage • SIP/H.248 auto-negotiation • Any port any service • Parental control	• Scheduled Wi-Fi shutdown • Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing	• 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 • Neighboring AP scanning
Multicast	**Power saving**	
• IGMP v2/v3 snooping • IGMP v2/v3 proxy • MLD v1/v2 snooping	• Indicator power saving • CoC v8	
Security	**Common O&M**	**Layer 3 features**
• SPI firewall • Filtering based on MAC/IP/URL addresses • Secure boot	• OMCI/Web UI/TR069 • Variable-length OMCI messages • Dual-system software backup and rollback	• 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
QoS	**Home network feature**	
• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation	• Visualized home network management • User-defined bandwidth allocation • Wi-Fi optimization & Wi-Fi roaming • Wi-Fi O&M	

Huawei Technologies Co., Ltd.

Address:Huawei Industrial Base Bantian, Longgang Shenzhen 518129 People's Republic of China

Website:http://www.huawei.com