Huawei OptiXstar EG8145B7N-50 Datasheet 01

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

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

Device Parameters

Dimensions (H x W x D)	40 mm x 150 mm x 108 mm (without external antenna and pads)	**Static power consumption**	5 W
Weight	About 282 g	**Maximum power consumption**	14 W
Operating temperature	0°C to 40°C	**NNI**	GPON
Operating humidity	5% RH to 95% RH (non-condensing)	**UNI**	1x2.5GE+3xGE+1xPOTS+1x USB*+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	**Indicators**	Power/PON/LOS/2.5GLAN/LAN2/LAN3/LAN4/TEL/USB/WLAN/WPS
Memory	128 MB Flash, 512 MB RAM	-	-

📖 **NOTE**

*: A plug-and-play USB port reserved for users.

Interface Parameters

GPON port	**POTS 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	• 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	**Ethernet port**
• 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	• 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

- DCM
- BSS Coloring
- Beamforming
- Band steering
- WPA3
- MLO (Multi-Link Operation)
- Multi-RU
- WMM/Multiple SSIDs/WPS

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	

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