

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

<p>GPON port</p> <ul style="list-style-type: none"> • 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 	<p>POTS port</p> <ul style="list-style-type: none"> • 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) <p>USB port</p> <ul style="list-style-type: none"> • USB2.0 • FTP-based network storage • File/Print sharing based on SAMBA • DLNA function
<p>WLAN</p> <ul style="list-style-type: none"> • IEEE 802.11 b/g/n/ax/be (2.4GHz) • IEEE 802.11 a/n/ac/ax/be (5GHz) • 2x2 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 	<p>Ethernet port</p> <ul style="list-style-type: none"> • 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

<ul style="list-style-type: none"> • DCM • BSS Coloring • Beamforming • Band steering • WPA3 • MLO (Multi-Link Operation) • Multi-RU • WMM/Multiple SSIDs/WPS 	
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Product Function

Smart interconnection	Smart service	Smart O&M
<ul style="list-style-type: none"> • Smart Wi-Fi coverage • SIP/H.248 auto-negotiation • Any port any service • Parental control 	<ul style="list-style-type: none"> • Scheduled Wi-Fi shutdown • Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing 	<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • IGMP v2/v3 snooping • IGMP v2/v3 proxy • MLD v1/v2 snooping 	<ul style="list-style-type: none"> • Indicator power saving • CoC v8 	
Security	Common O&M	Layer 3 features
<ul style="list-style-type: none"> • SPI firewall • Filtering based on MAC/IP/URL addresses • Secure boot 	<ul style="list-style-type: none"> • OMCI/Web UI/TR069 • Variable-length OMCI messages • Dual-system software backup and rollback 	<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation 	<ul style="list-style-type: none"> • Visualized home network management • User-defined bandwidth allocation • Wi-Fi optimization & Wi-Fi roaming • Wi-Fi O&M 	

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