

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
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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+1xUSB+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/LAN2/LAN3/2.5GLAN/TEL/USB/WLAN/WPS

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


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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Huawei Technologies Co., Ltd.

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

Website: <http://www.huawei.com>