

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+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

GPON port	POTS port
<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 	<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)
	USB port
	<ul style="list-style-type: none"> • USB2.0 • FTP-based network storage • File/Print sharing based on SAMBA • DLNA function
WLAN	Ethernet port
<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: 7 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 	<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 	

Copyright © Huawei Technologies Co., Ltd. 2024. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions

 HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

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

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