

Huawei OptiXstar EN8145B7Ns Datasheet 01

Huawei intelligent XGS-PON and Wi-Fi 7 routing-type ONT

Overview

Huawei OptiXstar EN8145B7Ns is an XGS-PON and Wi-Fi 7 routing-type ONT. It uses the XGS-PON 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 functions.

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



Device Parameters

Dimensions (H x W x D)	157 mm x 250 mm x 30 mm (excluding the base)	System power supply	12 V DC, 1.5 A
Weight (without power adapter)	About 543 g (excluding the base)	Static power consumption	6.6 W
Installation mode	Vertically placed on a desk or mounted on a wall	Maximum power consumption	18 W
Operating temperature	0°C to +40°C	NNI	XGS-PON
Power adapter input	100 V to 240 V AC, 50/60 Hz	UNI	1x2.5GE+3xGE+1xPOTS+1xUSB2.0+2.4GHz&5GHz Wi-Fi 7
Operating humidity	5%–95% RH, non-condensing	Optical connector	SC/APC
Memory	128 MB Flash, 512 MB RAM	Indicator	- Indicator on front panel (Power+LOS+PON integrated) - Indicators on rear panel: WLAN/WPS/USB/LAN/TEL

Interface Parameters

XGS-PON port	WLAN
- Class XGSN2 - Receiver sensitivity: -28 dBm - Wavelengths: 1260–1280 nm upstream, 1575–1580 nm downstream - Upstream and downstream rate: 9.953 Gbit/s upstream, 9.953 Gbit/s downstream - Wavelength blocking filter (WBF) - Flexible mapping between GEM Port and TCONT - SN/Password/SN+Password/Bi-directional authentication based on OMCI - Upstream and downstream FEC - SR-DBA and NSR-DBA	- IEEE 802.11 b/g/n/ax/be (2.4 GHz) - IEEE 802.11 a/n/ac/ax/be (5 GHz) 2×2 MIMO (2.4 GHz&5 GHz) - Antenna gain: 5 dBi - WMM (Wi-Fi Multi Media) - Air interface rate: 688 Mbit/s(2.4 GHz); 2882 Mbit/s(5 GHz) 4096 QAM 160 MHz frequency bandwidth - WPA3/WPA2/WPA1 - WPS - Multiple SSIDs - MU-MIMO - MLO (Multi-Link Operation) - Multi-RU
Ethernet port	
- Ethernet port-based VLAN tags and tag removal 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission - QinQ VLAN - Limitation on the number of learned MAC addresses - MAC address learning - GE port supports 10 Mbit/s, 100 Mbit/s and 1000 Mbit/s auto-adaptation 2.5GE port supports 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s and 2500 Mbit/s auto-adaptation	

POTS port	USB port
- Maximum 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)	- USB2.0 - FTP-based network storage - File/Print sharing based on SAMBA - DLNA function

Product Function

Smart interconnection	Smart service	Smart O&M	Common 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 - eMDI - Rogue ONT detection and isolation from the OLT - Call emulation, and circuit test and loop-line test - PPPoE/DHCP simulation testing - WLAN emulation	- OMCI/Web UI/TR069 - Variable-length OMCI messages - Dual-system software backup and rollback
Multicast	Security	Layer 3 features	Home network feature
- IGMP v2/v3 proxy - IGMP v2/v3 snooping - MLD v1/v2 snooping	- SPI firewall - Anti-DOS attack - Filtering based on MAC/IP/URL addresses	- 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	- Visualized home network management - User-defined bandwidth allocation - Wi-Fi optimization & Wi-Fi roaming - Wi-Fi O&M - intelligent identification and anti-interference
Power saving	QoS		
- Indicator power saving - COC V8	- Ethernet port rate limitation 802.1p priority - SP/WRR/SP+WRR - Broadcast packet rate limitation		

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