Huawei OptiXstar EG8145X6N Datasheet 01

Huawei intelligent GPON and Wi-Fi 6 routing-type ONT

Overview

Huawei OptiXstar EG8145X6N is an intelligent GPON and Wi-Fi 6 routing-type ONT. It uses the GPON Wi-Fi 6 technology to implement ultra-broadband access, high performance and wide coverage for users. The high forwarding performance ensures the user experience of voice, data and HD video services, and provides customers with an ideal all-optical access solution and future-oriented service support capability.

- Next generation Wi-Fi 6 technology
- Smart service
- Smart interconnection
- Smart O&M

Device Parameters

Dimensions	230mm x 156mm x 35mm (without external antenna and pads)	System power supply	11 to 14 V DC, 1.5 A
Weight	About 550 g	Static power consumption	5.5 W
Operating temperature	0°C to 40°C	Maximum power consumption	18 W
Operating humidity	5% RH to 95% RH (non-condensing)	NNI	GPON
Power adapter input	170 to 240 V AC, 50/60 Hz	UNI	4xGE+1xUSB+1x POTS+2.4GHz&5GHz Wi-Fi 6
Memory	128M flash, 512M RAM	Optical connector	SC/APC
Indicators	Power/PON/LOS/LAN/TEL/USB/WLAN/WPS		

Interface Parameters

GPON port	WLAN
- 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	- IEEE 802.11 b/g/n/ax (2.4GHz) - IEEE 802.11 a/n/ac/ax (5GHz) 2×2 MIMO (2.4GHz&5GHz) - Antenna gain: 5 dBi - WMM (Wi-Fi Multi Media) - Multiple SSIDs - WPS 2.4GHz/5GHz concurrent - Air interface rate: 574 Mbit/s (2.4GHz), 2402 Mbit/s (5GHz) - Beamforming - Band steering - DL MU-MIMO 1024QAM 160MHz bandwidth - WPA3
Ethernet port	**POTS 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 - Supporting 10 Mbit/s, 100 Mbit/s and 1000 Mbit/s auto-adaptation	- 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
	USB 2.0

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 • Association of one account with two POTS ports	• 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 • Neighboring AP scanning	• 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/snooping • MLD v1/v2 snooping	• SPI firewall • 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
Power saving	**QoS**		
• Indicator power saving • COC V7	• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation		