EN8145X6 Datasheet 01

Huawei intelligent XG-PON and Wi-Fi 6 routing-type ONT

Overview

The Huawei OptiXstar EN8145X6 is an XG-PON and Wi-Fi 6 routing-type ONT. It uses the XG-PON and Wi-Fi 6 technologys 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 4 GE ports, 1 POTS port, 1 USB port and 1 2.4G&5G Wi-Fi 6 port.

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

Device Parameters

Operating temperature	0°C to 40°C	**NNI**	XG-PON
Operating humidity	5% RH to 95% RH (non-condensing)	**UNI**	4*GE+1*POTS+2.4G/5G Wi-Fi 6+1USB
Power adapter input	100–240 V AC, 50/60 Hz	**Optical connector**	SC/UPC
System power supply	11–14 V DC, 1.5 A	**Indicators**	Power/PON/LOS/LAN/TEL/USB/WLAN/WPS
Static power consumption	8 W	**Weight**	About 400 g
Maximum power consumption	18 W	**Dimensions (H x W x D)** (without external antenna and pads)	40 mm x 185 mm x 120 mm
Memory	128M Flash, 256M RAM		

Interface Parameters

XG-PON port	**POTS port**
• Class N1/N2a/E1 • Receiver sensitivity: -28 dBm • Wavelengths: US 1260-1280 nm, DS 1575-1580 nm • 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 • 2.5 Gbit/s upstream, 10 Gbit/s downstream	• 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)
	USB port
	• USB2.0 • FTP-based network storage • File/Print sharing based on SAMBA • DLNA function
WLAN	**Ethernet port**
• IEEE 802.11 b/g/n/ax (2.4G) • IEEE 802.11 a/n/ac/ax (5G) • 2 ×2 MIMO (2.4G)y 5G • WPA3 • Antenna gain: 5 dBi • WMM/Multiple SSIDs/WPS • 2.4G&5G concurrent • Air interface rate: 574 Mbit/s (2.4G), 2402 Mbit/s (5G) • Beamforming • Band steering • DL OFDMA • DL MU-MIMO • 1024QAM • 160MHz frequency bandwidth	• 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 • Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s

• WPA3	

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/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 • intelligent identification and anti-interference
Power saving	QoS		
• Indicator power saving • COC V7	• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation		