

Huawei OptiXstar EN8255X6s-8X Datasheet 01

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

Overview

The Huawei OptiXstar EN8255X6s-8X is an XGS-PON and Wi-Fi 6 routing-type ONT. It uses the XGS-PON and Wi-Fi 6 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 10GE port, four GE ports, two POTS ports, one USB port and 2.4GHz&5GHz Wi-Fi 6 function.

- Next generation Wi-Fi 6 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)	176mm x 250mm x 35mm (excluding base) 186mm x 250mm x 52mm (including base)	Maximum power consumption	30 W
Weight	About 705 g	NNI	XGS-PON
Operating temperature	0°C to 40°C	UNI	1x10GE+4xGE+2xPOTS+1xUSB2.0+2.4 GHz&5GHz Wi-Fi 6
Operating humidity	5% RH to 95% RH (non- condensing)	Optical connector	SC/APC
Power adapter input	100–240 V AC, 50/60 Hz	Indicators	Power/PON/LOS/TEL1/TEL2/LAN1- LAN4/10GLAN/WLAN/WPS/USB
System power supply	12 V DC, 3 A	Memory	256 MB Flash, 512 MB RAM
Static power consumption	12.5 W		

Interface Parameters

XGS-PON port	POTS port
• Class N1/N2/E1 • 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	• 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 (2.4GHz) • IEEE 802.11 a/n/ac/ax (5GHz) • 4 × 4 MIMO (2.4GHz) • 4 × 4 MIMO (5GHz) • 2.4GHz&5GHz concurrent • Antenna gain: 2 dBi • Air interface rate: 1147 Mbit/s (2.4GHz), 4804 Mbit/s	• 1x10GE+4xGE • 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

(5GHz) • 4096 QAM • 160 MHz frequency bandwidth • OFDMA • UL/DL MU-MIMO • DCM • BSS Coloring • Beamforming • Band steering • WPA3 • WMM/Multiple SSIDs/WPS • Zero-DFS	1000 Mbit/s • 10GE port supports auto-adaptive 100 Mbit/s, 1000 Mbit/s, 2500 Mbit/s, 5000 Mbit/s or 10000 Mbit/s
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Product Function

Smart interconnection	Smart service	Smart 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
Multicast	Power saving	
• IGMP v2/v3 proxy/snooping • MLD v1/v2 snooping	• LED indicator power saving • CoC v8	
Security	Common O&M	Layer 3 features
• SPI firewall • Filtering based on MAC/IP/URL addresses • Secure boot	• OMCI/Web UI/TR069 • Variable-length OMCI messages • Dual-system software backup and rollback	• 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	
• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation	• Visualized home network management • User-defined bandwidth allocation • Wi-Fi optimization & Wi-Fi roaming • Wi-Fi O&M	

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