

# 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





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	
<ul> <li>Class N1/N2/E1</li> <li>Receiver sensitivity: -28 dBm</li> <li>Wavelengths: 1260–1280 nm upstream, 1575–1580 nm downstream</li> <li>Upstream and downstream rate: 9.953 Gbit/s upstream, 9.953 Gbit/s downstream</li> </ul>	<ul> <li>Maximum REN: 4</li> <li>G.711A/µ, G.729a/b and G.722 encoding/decoding</li> <li>T.30/T.38/G.711 fax mode</li> <li>DTMF</li> <li>Emergency calls (with the SIP protocol)</li> </ul>	
<ul> <li>Wavelength blocking filter (WBF)</li> <li>Flexible mapping between GEM Port and TCONT</li> <li>SN/Password/SN+Password/Bi-directional authentication based on OMCI</li> <li>Upstream and downstream FEC</li> <li>SR-DBA and NSR-DBA</li> </ul>	<ul> <li>USB2.0</li> <li>FTP-based network storage</li> <li>File/Print sharing based on SAMBA</li> <li>DLNA function</li> </ul>	
<ul> <li>IEEE 802.11 b/g/n/ax (2.4GHz)</li> <li>IEEE 802.11 a/n/ac/ax (5GHz)</li> <li>4 x 4 MIMO (2.4GHz)</li> <li>4 x 4 MIMO (5GHz)</li> </ul>	<ul> <li>1x10GE+4xGE</li> <li>Ethernet port-based VLAN tags and tag removal</li> <li>1:1 VLAN, N:1 VLAN, or VLAN transparent transmission</li> <li>QinQ VLAN</li> </ul>	
<ul> <li>2.4GHz&amp;5GHz concurrent</li> <li>Antenna gain: 2 dBi</li> <li>Air interface rate: 1147 Mbit/s (2.4GHz), 4804 Mbit/s</li> </ul>	<ul> <li>Limit on the number of learned MAC addresses</li> <li>MAC address learning</li> <li>GE port supports auto-adaptive 10 Mbit/s, 100 Mbit/s or</li> </ul>	

(5GHz)

4096 QAM

1000 Mbit/s

1006 port supports auto-adaptive 100 Mbit/s, 1000 Mbit/s, 2500 Mbit/s, 5000 Mbit/s or 10000 Mbit/s

OFDMA

UL/DL MU-MIMO

DCM

BSS Coloring

Beamforming

Band steering

WPA3

## **Product Function**

• WMM/Multiple SSIDs/WPS

Zero-DFS

Smart interconnection	Smart service	Smart O&M
<ul> <li>Smart Wi-Fi coverage</li> <li>SIP/H.248 auto-negotiation</li> <li>Any port any service</li> <li>Parental control</li> </ul>	<ul> <li>Scheduled Wi-Fi shutdown</li> <li>Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing</li> <li>Association of one account with two POTS ports</li> </ul>	<ul> <li>IPTV video quality diagnosis</li> <li>eMDI</li> <li>Rogue ONT detection and isolation from the OLT</li> <li>Call emulation, and circuit test</li> </ul>
<ul><li>Multicast</li><li>IGMP v2/v3 proxy/snooping</li><li>MLD v1/v2 snooping</li></ul>	<ul><li>Power saving</li><li>LED indicator power saving</li><li>CoC v8</li></ul>	<ul> <li>and loop-line test</li> <li>PPPoE/DHCP simulation testing</li> <li>Neighboring AP scanning</li> </ul>
Security	Common O&M	Layer 3 features
<ul> <li>SPI firewall</li> <li>Filtering based on MAC/IP/URL addresses</li> <li>Secure boot</li> </ul>	<ul> <li>OMCI/Web UI/TR069</li> <li>Variable-length OMCI messages</li> <li>Dual-system software backup and rollback</li> </ul>	<ul> <li>PPPoE/Static IP/DHCP</li> <li>NAT/NAPT</li> <li>Port forwarding</li> <li>ALG, UPnP</li> </ul>
QoS	Home network feature	DDNS/DNS server/DNS client
<ul> <li>Ethernet port rate limitation</li> <li>802.1p priority</li> <li>SP/WRR/SP+WRR</li> <li>Broadcast packet rate limitation</li> </ul>	<ul> <li>Visualized home network management</li> <li>User-defined bandwidth allocation</li> <li>Wi-Fi optimization &amp; Wi-Fi roaming</li> <li>Wi-Fi O&amp;M</li> </ul>	<ul> <li>IPv6/IPv4 dual stack, DS-Lite and IPv6 SPI</li> <li>Static/Default routes</li> <li>Multiple services on one WAN port</li> </ul>

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