

## 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 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 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

## Quick Specification

Table 1 shows the Quick Specification.

Model	OptiXstar EN8145X6
Dimensions (W x D x H)	40 mm x 185 mm x 120 mm (without external antenna and pads)
Weight	About 400 g
Operating Temperature	0°C to 40°C
Operating Humidity	5% RH to 95% RH (non-condensing)
Power Adapter Input	100–240 V AC, 50–60 Hz
System Power Supply	11–14 V DC, 1.5 A
Static Power Consumption	8 W
Maximum Power Consumption	18 W
NNI	XG-PON
UNI	4*GE+1*POTS+2.4G/5G Wi-Fi6+1USB
Indicators	Power/PON/LOS/LAN/TEL/USB/WLAN/WPS
Memory	128 MB Flash, 256 MB RAM

Figure 1 shows the appearance of OptiXstar EN8145X6.



## Product Details

### Port Parameters

<p>XG-PON Port</p>	<ul style="list-style-type: none"> <li>• SC/UPC</li> <li>• Class N1/N2a/E1</li> <li>• Receiver sensitivity: -28 dBm</li> <li>• Wavelengths: US 1260-1280 nm, DS 1575-1580 nm</li> <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> <li>• 2.5 Gbit/s upstream, 10 Gbit/s downstream</li> </ul>
<p>Ethernet Port</p>	<ul style="list-style-type: none"> <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> <li>• Limit on the number of learned MAC addresses</li> <li>• MAC address learning</li> <li>• Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s</li> </ul>
<p>POTS Port</p>	<ul style="list-style-type: none"> <li>• Maximum REN: 4</li> <li>• G.711A/μ, G.729a/b and G.722 encoding/decoding</li> </ul>



	<ul style="list-style-type: none"> <li>• T.30/T.38/G.711 fax mode</li> <li>• DTMF</li> <li>• Emergency calls (with the SIP protocol)</li> </ul>
USB Port	<ul style="list-style-type: none"> <li>• USB2.0</li> <li>• FTP-based network storage</li> <li>• File/Print sharing based on SAMBA</li> <li>• DLNA function</li> </ul>
WLAN	<ul style="list-style-type: none"> <li>• IEEE 802.11 b/g/n/ax (2.4G)</li> <li>• IEEE 802.11 a/n/ac/ax (5G)</li> <li>• 2 × 2 MIMO (2.4G)</li> <li>• 2 × 2 MIMO (5G)</li> <li>• Antenna gain: 5 dBi</li> <li>• WMM/Multiple SSIDs/WPS</li> <li>• 2.4G&amp;5G concurrency</li> <li>• Air interface rate: 574 Mbit/s (2.4G), 2402 Mbit/s (5G)</li> <li>• Beamforming</li> <li>• Band steering</li> <li>• DL OFDMA</li> <li>• DL MU-MIMO</li> <li>• 1024QAM</li> <li>• 160MHz frequency bandwidth</li> <li>• WPA3</li> </ul>

## Function List

Smart Interconnection	<ul style="list-style-type: none"> <li>• Smart Wi-Fi coverage</li> <li>• SIP/H.248 auto-negotiation</li> <li>• Any port any service</li> <li>• Parental control</li> </ul>
Smart Service	<ul style="list-style-type: none"> <li>• Scheduled Wi-Fi shutdown</li> <li>• Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing</li> </ul>
Smart O&M	<ul style="list-style-type: none"> <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 and loop-line test</li> <li>• PPPoE/DHCP simulation testing</li> <li>• WLAN emulation</li> </ul>
Layer 3 Features	<ul style="list-style-type: none"> <li>• PPPoE/Static IP/DHCP</li> <li>• NAT/NAPT</li> <li>• Port forwarding</li> <li>• ALG, UPnP</li> <li>• DDNS/DNS server/DNS client</li> </ul>





	<ul style="list-style-type: none"> <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>
Security	<ul style="list-style-type: none"> <li>• SPI firewall</li> <li>• Filtering based on MAC/IP/URL addresses</li> </ul>
Multicast	<ul style="list-style-type: none"> <li>• IGMP v2/v3 proxy/snooping</li> <li>• MLD v1/v2 snooping</li> </ul>
Common O&M	<ul style="list-style-type: none"> <li>• OMCI/Web UI/TR069</li> <li>• Variable-length OMCI messages</li> <li>• Dual-system software backup and rollback</li> </ul>
Power Saving	<ul style="list-style-type: none"> <li>• Indicator power saving</li> <li>• COC V7.1</li> </ul>
QoS	<ul style="list-style-type: none"> <li>• Ethernet port rate limitation</li> <li>• 802.1p priority</li> <li>• SP/WRR/SP+WRR</li> <li>• Broadcast packet rate limitation</li> </ul>

## Get More Information

Do you have any question about the OptiXstar EN8145X6?

Contact us now via [info@hi-network.com](mailto:info@hi-network.com).

## Specification

OptiXstar EN8145X6 Specification	
Dimensions (W x D x H)	40 mm x 185 mm x 120 mm (without external antenna and pads)
Weight	About 400 g
Operating Temperature	0°C to 40°C
Operating Humidity	5% RH to 95% RH (non-condensing)
Power Adapter Input	100–240 V AC, 50–60 Hz
System Power Supply	11–14 V DC, 1.5 A
Static Power Consumption	8 W
Maximum Power Consumption	18 W
NNI	XG-PON
UNI	4*GE+1*POTS+2.4G/5G Wi-Fi6+1USB
Optical Connector	SC/UPC
Indicators	Power/PON/LOS/LAN/TEL/USB/WLAN/WPS





Memory	128 MB Flash, 256 MB RAM
XG-PON Port	<ul style="list-style-type: none"> <li>• SC/UPC</li> <li>• Class N1/N2a/E1</li> <li>• Receiver sensitivity: -28 dBm</li> <li>• Wavelengths: US 1260-1280 nm, DS 1575-1580 nm</li> <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> <li>• 2.5 Gbit/s upstream, 10 Gbit/s downstream</li> </ul>
Ethernet Port	<ul style="list-style-type: none"> <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> <li>• Limit on the number of learned MAC addresses</li> <li>• MAC address learning</li> <li>• Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s</li> </ul>
POTS Port	<ul style="list-style-type: none"> <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>
USB Port	<ul style="list-style-type: none"> <li>• USB2.0</li> <li>• FTP-based network storage</li> <li>• File/Print sharing based on SAMBA</li> <li>• DLNA function</li> </ul>
WLAN	<ul style="list-style-type: none"> <li>• IEEE 802.11 b/g/n/ax (2.4G)</li> <li>• IEEE 802.11 a/n/ac/ax (5G)</li> <li>• 2 × 2 MIMO (2.4G)</li> <li>• 2 × 2 MIMO (5G)</li> <li>• Antenna gain: 5 dBi</li> <li>• WMM/Multiple SSIDs/WPS</li> <li>• 2.4G&amp;5G concurrency</li> <li>• Air interface rate: 574 Mbit/s (2.4G), 2402 Mbit/s (5G)</li> <li>• Beamforming</li> <li>• Band steering</li> <li>• DL OFDMA</li> <li>• DL MU-MIMO</li> <li>• 1024QAM</li> <li>• 160MHz frequency bandwidth</li> <li>• WPA3</li> </ul>





## Want to Buy

---

[Get a Quote](#)

[Learn More](#) about Hi-Network



[Search](#) our Resource Library



[Follow](#) us on LinkedIn



Contact for [Sales or Support](#)

## Contact HI-NETWORK.COM For Global Fast Shipping

---

HongKong Office Tel: +00852-66181601

HangZhou Office Tel: +0086-571-86729517

Email: [info@hi-network.com](mailto:info@hi-network.com)

Skype: [echo.hinetwork](https://www.skype.com/people/echo.hinetwork)

WhatsApp Business: +8618057156223

