

## Overview

The Huawei OptiXstar EG8145X6-10 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.

It provides four GE ports, one POTS port, one USB port and 2.4GHz&5GHz Wi-Fi 6 function.

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

## Quick Specification

Table 1 shows the Quick Specification.

Model	OptiXstar EG8145X6-10
Dimensions (H x W x D)	35 mm x 155 mm x 105 mm (without external antenna and pads)
Weight (Without Power Adapter)	About 246 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	12 V DC, 1 A
Static Power Consumption	6.6 W
Maximum Power Consumption	12 W
Memory	128MB Flash, 256MB RAM
NNI	GPON
UNI	4xGE+1xPOTS+2.4GHz&5GHz Wi-Fi 6+1xUSB2.0
Optical Connector	SC/APC
Indicators	Power/PON/LOS/LAN/TEL/USB/WLAN/WPS

Figure 1 shows the appearance of OptiXstar EG8145X6-10.



## Product Details

### Interface Parameters

GPON Port	<ul style="list-style-type: none"> <li>• Class B+</li> <li>• Receiver sensitivity: -27 dBm</li> <li>• Overload optical power: -8 dBm</li> <li>• Wavelengths: US 1310 nm, DS 1490 nm</li> <li>• Wavelength blocking filter (WBF) of G.984.5</li> <li>• Flexible mapping between GEM Port and TCONT</li> <li>• GPON: consistent with the SN or password authentication defined in G.984.3</li> <li>• Bi-directional FEC</li> <li>• SR-DBA and NSR-DBA</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 ringer equivalence number (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> </ul>



	<ul style="list-style-type: none"> <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 concurrent</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>

## Product Function

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>
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>
Multicast	<ul style="list-style-type: none"> <li>• IGMP v2/v3 proxy/snooping</li> <li>• MLD v1/v2 snooping</li> </ul>
Security	<ul style="list-style-type: none"> <li>• SPI firewall</li> <li>• Filtering based on MAC/IP/URL addresses</li> </ul>
Power Saving	<ul style="list-style-type: none"> <li>• Indicator power saving</li> <li>• COC V8</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>
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> <li>• IPv6/IPv4 dual stack, DSLite and IPv6 SPI</li> <li>• Static/Default routes</li> <li>• Multiple services on one WAN port</li> </ul>
Home Network Feature	<ul style="list-style-type: none"> <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> <li>• intelligent identification and anti-interference</li> </ul>

## Get More Information

Do you have any question about the OptiXstar EG8145X6-10?

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

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