

Huawei OptiXstar EG8145X6-10 Datasheet

01

Huawei intelligent GPON and Wi-Fi 6 routing-type ONT

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



Device Parameters

Operating temperature	0°C to 40°C	NNI	GPON
Operating humidity	5% RH to 95% RH (non-condensing)	UNI	4xGE+1xPOTS+2.4GHz&5GHz Wi-Fi 6+1xUSB2.0
Power adapter input	100–240 V AC, 50/60 Hz	Optical connector	SC/APC
System power supply	12V DC, 1A	Indicators	Power/PON/LOS/LAN/TEL/USB/WLAN/WPS
Static power consumption	6.6 W	Weight	About 246 g
Maximum power consumption	12 W	Dimensions (H x W x D) (without external antenna and pads)	35 mm x 155 mm x 105 mm
Memory	128MB Flash, 256MB RAM		

Interface Parameters

GPON port	POTS port
<ul style="list-style-type: none"> ▫ Class B+ ▫ Receiver sensitivity: -27 dBm ▫ Overload optical power: -8 dBm 	<ul style="list-style-type: none"> ▫ Maximum ringer equivalence number (REN): 4 ▫ G.711A/μ, G.729a/b and G.722 encoding/decoding ▫ T.30/T.38/G.711 fax mode

<ul style="list-style-type: none"> ▫ Wavelengths: US 1310 nm, DS 1490 nm ▫ Wavelength blocking filter (WBF) of G.984.5 ▫ Flexible mapping between GEM Port and TCONT ▫ GPON: consistent with the SN or password authentication defined in G.984.3 ▫ Bi-directional FEC ▫ SR-DBA and NSR-DBA 	<ul style="list-style-type: none"> ▫ DTMF ▫ Emergency calls (with the SIP protocol) <p>USB port</p> <ul style="list-style-type: none"> ▫ USB2.0 ▫ FTP-based network storage ▫ File/Print sharing based on SAMBA ▫ DLNA function
<p>WLAN</p>	<p>Ethernet port</p>
<ul style="list-style-type: none"> ▫ IEEE 802.11 b/g/n/ax (2.4G) ▫ IEEE 802.11 a/n/ac/ax (5G) ▫ 2 × 2 MIMO (2.4G) ▫ 2 × 2 MIMO (5G) ▫ 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 ▫ WPA3 	<ul style="list-style-type: none"> ▫ 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

Product Function


Smart interconnection	Smart service	Smart O&M	Common O&M
<ul style="list-style-type: none"> ▫ Smart Wi-Fi coverage ▫ SIP/H.248 auto-negotiation ▫ Any port any service ▫ Parental control 	<ul style="list-style-type: none"> ▫ Scheduled Wi-Fi shutdown ▫ Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing 	<ul style="list-style-type: none"> ▫ 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 	<ul style="list-style-type: none"> ▫ OMCI/Web UI/TR069 ▫ Variable-length OMCI messages ▫ Dual-system software backup and rollback
Multicast	Security	Layer 3 features	Home network feature
<ul style="list-style-type: none"> ▫ IGMP v2/v3 proxy/snooping ▫ MLD v1/v2 snooping 	<ul style="list-style-type: none"> ▫ SPI firewall ▫ Filtering based on MAC/IP/URL addresses 	<ul style="list-style-type: none"> ▫ PPPoE/Static IP/DHCP ▫ NAT/NAPT ▫ Port forwarding ▫ ALG, UPnP ▫ DDNS/DNS server/DNS client 	<ul style="list-style-type: none"> ▫ Visualized home network management ▫ User-defined bandwidth allocation ▫ Wi-Fi optimization & Wi-Fi roaming
Power saving	QoS		
<ul style="list-style-type: none"> ▫ Indicator power saving 	<ul style="list-style-type: none"> ▫ Ethernet port rate limitation 		

<ul style="list-style-type: none"> ▫ COC V8 	<ul style="list-style-type: none"> ▫ 802.1p priority ▫ SP/WRR/SP+WRR ▫ Broadcast packet rate limitation 	<ul style="list-style-type: none"> ▫ IPv6/IPv4 dual stack, DS-Lite and IPv6 SPI ▫ Static/Default routes ▫ Multiple services on one WAN port 	<ul style="list-style-type: none"> ▫ Wi-Fi O&M ▫ intelligent identification and anti-interference
--	--	--	---

Copyright © Huawei Technologies Co., Ltd. 2022. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions

 **HUAWEI** and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base Bantian,
Longgang Shenzhen 518129 People's
Republic of China

Website: <http://www.huawei.com>