

Huawei OptiXstar EG8147X6-10 Datasheet 01

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

Overview

The Huawei OptiXstar EG8147X6-10 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 CATV 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+1xCATV+2.4 GHz&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, 1.5 A	Indicators	Power/PON/LOS/LAN/TEL/USB/WLAN/WPS/CATV
Static power consumption	6.8 W	Weight	About 305g
Maximum power consumption	18 W	Dimensions (H x W x D) (without external antenna and pads)	35 mm x 195 mm x 120 mm
Memory	128MB Flash, 256MB RAM		

Interface Parameters

<p>GPON port</p> <ul style="list-style-type: none"> • Class B+ • Receiver sensitivity: -27 dBm • Overload optical power: -8 dBm • 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 	<p>POTS port</p> <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 • 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> <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 	<p>Ethernet port</p> <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 <p>CATV port</p> <ul style="list-style-type: none"> • Frequency Range 54 MHz to 1000 MHz • Output resistance 75 ohms • Received average optical power: -8dBm to +2dBm • RF output power: ≥17dBmV/Ch (With RF source analog channel power input = 20dBmV/ch, and 40 analog / 63 digital channels (4.3% OMI analog, 2.15 % digital))


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 IPv6/IPv4 dual stack, DS-Lite and IPv6 SPI Static/Default routes Multiple services on one WAN port 	<ul style="list-style-type: none"> Visualized home network management User-defined bandwidth allocation Wi-Fi optimization & Wi-Fi roaming Wi-Fi O&M intelligent identification and anti-interference
Power saving	QoS		
<ul style="list-style-type: none"> Indicator power saving COC V8 	<ul style="list-style-type: none"> Ethernet port rate limitation 802.1p priority SP/WRR/SP+WRR Broadcast packet rate limitation 		

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Huawei Technologies Co., Ltd.

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

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