Huawei OptiXstar EG8147X6-10 Datasheet 02

Huawei intelligent GPON and premium routing-type ONT

Overview

The Huawei OptiXstar EG8147X6-10 is an intelligent GPON and Wi-Fi routing-type ONT. It uses the GPON Wi-Fi 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 Wi-Fi function.

- Next generation Wi-Fi 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+ Wi-Fi +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

GPON port	**POTS port**
• 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	• 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)

	USB port
	• USB2.0 • FTP-based network storage • File/Print sharing based on SAMBA • DLNA function

WLAN	**Ethernet port**
• 2 × 2 MIMO • Antenna gain: 5 dBi • WMM/Multiple SSIDs/WPS • Beamforming • Band steering • DL OFDMA • DL MU-MIMO • 1024QAM • 160MHz frequency bandwidth • WPA3	• 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

	CATV port
	• 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
• Smart Wi-Fi coverage • SIP/H.248 auto-negotiation • Any port any service • Parental control	• Scheduled Wi-Fi shutdown • Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing	• 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	• OMCI/Web UI/TR069 • Variable-length OMCI messages • Dual-system software backup and rollback

Multicast	Security	Layer 3 features	Home network feature
• IGMP v2/v3 proxy/snooping • MLD v1/v2 snooping	• SPI firewall • Filtering based on MAC/IP/URL addresses	• 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	• 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**		
• Indicator power saving • COC V8	• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation		