

EG8041X7-10 Datasheet 01

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

Overview

The Huawei OptiXstar EG8041X7-10 is a GPON and Wi-Fi 6 routing-type ONT. It uses the GPON 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 data services, and provides customers with an ideal all-optical access solution and future-oriented service support capability.

- Smart service
- Smart interconnection
- Smart O&M



Device Parameters

Dimensions (H x W x D)	40 mm x 150 mm x 108 mm (without external antenna and pads)	Static power consumption	4.8 W
Weight	About 280 g	Maximum power consumption	12 W

Operating temperature	0°C to 40°C	NNI	GPON
Operating humidity	5% RH to 95% RH (non-condensing)	UNI	4xGE+2.4GHz/5GHz Wi-Fi 6
Power adapter input	100–240 V AC, 50/60 Hz	Optical connector	SC/APC
System power supply	12 V DC, 1 A	Indicators	Power/PON/LOS/LAN4/LAN3/LAN2/LAN1/WLAN/WPS
Memory	128 MB Flash, 256 MB RAM	-	-

Interface Parameters

GPON port	Ethernet port
• Class B+ • Receiver sensitivity: -27 dBm • Overload optical power: -8 dBm • Wavelengths: 1310 nm upstream, 1490 nm downstream • 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	• 4xGE • 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 • GE port supports auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s
WLAN	
• IEEE 802.11 b/g/n/ax (2.4 GHz) • IEEE 802.11 a/n/ac/ax (5 GHz) • 2×2 MIMO (2.4 GHz&5 GHz) • Antenna gain: 7 dBi* (5 GHz), 5 dBi (2.4 GHz) • Air interface rate: 574 Mbit/s (2.4 GHz), 2402 Mbit/s (5 GHz) • 160 MHz frequency bandwidth • OFDMA • MU-MIMO • DCM • BSS Coloring • Beamforming • Band steering • WPA3 • WMM/Multiple SSIDs/WPS	
*: The 7 dBi antennas are applicable to scenarios where the transmit power is not limited. If the local laws and regulations stipulate that the transmit power must be lower than 31 dBm, the coverage performance of 7 dBi antennas may deteriorate compared with that of 5 dBi antennas in some scenarios. Select applicable products based on local laws and regulations.	

Product Function

Smart interconnection	Smart service	Smart O&M
- Smart Wi-Fi coverage - 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 - Rogue ONT detection and isolation from the OLT - PPPoE/DHCP simulation testing - Neighboring AP scanning
Multicast	Power saving	
- IGMP v2/v3 snooping - IGMP v2/v3 proxy - MLD v1/v2 snooping	Indicator power saving	
Security	Common O&M	Layer 3 features
- SPI firewall - Filtering based on MAC/IP/URL addresses - Secure boot	- OMCI/Web UI/TR069 - Variable-length OMCI messages - Dual-system software backup and rollback	- 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
QoS	Home network feature	
- Ethernet port rate limitation 802.1p priority - SP/WRR/SP+WRR - Broadcast packet rate limitation	- Visualized home network management - User-defined bandwidth allocation - Wi-Fi optimization & Wi-Fi roaming - Wi-Fi O&M	

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