

Huawei OptiXstar W826E Datasheet

Wi-Fi 6 ONU for Campus 10G Optical Access

Overview

Huawei OptiXstar W826E is an XGS-PON 10G upstream Wi-Fi 6 ONU that provides four GE electrical ports, one POTS port, one USB port, and 2.4 GHz, 5 GHz Wi-Fi 6. It can be used for wired access, voice access, and Wi-Fi coverage in hotels, apartments, schools, enterprises, and governments.

- Supports local power supply through a power adapter and remote power supply through a PoF cable.
- Supports multiple installation modes, such as wall-mounted and ceiling-mounted.
- Supports the FIT and FAT management modes.
- Supports 2.4 GHz (2x2 MIMO) and 5 GHz (2x2 MIMO) dual-band Wi-Fi 6, with an air interface rate up to 2.976 Gbit/s.
- Supports radio calibration and roaming between Wi-Fi 6 ONUs.
- Multi-network convergence, supporting ONU port-level hard-isolated. Different ports of an ONU can be securely connected to multiple networks through the hard-isolated technology.



NOTE

The schematic diagram in this document may differ from the actual product.

Device Parameters

Dimensions (H x W x D)	230 mm x 230 mm x 35 mm	Weight (without adapter)	About 702 g
Power supply to the entire system	<ul style="list-style-type: none">Adapter: 12V DC, 2APoF: 48 V DC, 0.5 A NOTE The copper cable in the optical/electrical composite cable uses the PoE protocol to supply power and does not transmit data.	Rated input range of the power adapter	100 - 240V AC, 50/60 Hz
Power consumption	<ul style="list-style-type: none">Static power consumption: 8.6 WMaximum power consumption: 21.6 W	Buttons	Reset button
Optical fiber interface	SC/UPC	Antenna Type	Built-in antenna
Storage	128 MB FLASH, 256 MB RAM	Installation Mode	Ceiling-mounted or wall-mounted
Operating Ambient Temperature	-10°C - 45°C	Operating ambient humidity	5% RH to 95% RH, non-condensing
Degree of protection	IP20	Surge Protection Specifications	<ul style="list-style-type: none">PoF: 4 kV in common mode, 1.5 kV in differential modeLAN: common mode 2.5 kVPOTS: common mode 2.5 kVAC power supply: 6 kV in common mode and 6 kV in differential mode
Interface	<ul style="list-style-type: none">Network side: XGS-PONUser side: 4*GE+1*POTS+2.4GHz&5GHz Wi-Fi 6	Indicators	One running indicator
Certification	SRRC/CE/Wi-Fi Alliance/CCC/MIIT network access		

Wi-Fi Specification

Support Protocols	<ul style="list-style-type: none">IEEE 802.11 b/g/n/ax(2.4GHz)IEEE 802.11 a/n/ac/ax(5GHz)	MIMO	2x2 MIMO (2.4GHz&5GHz)
Antenna gain	2dBi	Air interface rate	574 Mbps (2.4GHz) 2402 Mbps (5GHz)
Maximum number of SSIDs on the radio	4	Maximum number of users on the radio	A maximum of 64 per frequency band

Maximum transmit power on the radio	2.4GHz: 26dBm 5GHz: 29dBm	Others	1024-QAM, 160MHz bandwidth, WPA3, DL MU MIMO
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Interface Parameter

XGS-PON port	Gigabit Ethernet port
<ul style="list-style-type: none"> Interface type: SC/UPC Transmission rate: 9.953 Gbit/s in the downlink and 9.953 Gbit/s in the uplink Receiver sensitivity: -28 dBm Overload optical power: -9 dBm Type B (single-homing&dual-homing) <p>NOTE</p> <p>If the optical power is greater than the overload optical power, the device may be damaged. In this case, connect an optical attenuator.</p>	<ul style="list-style-type: none"> MAC address limit MAC address learning Gigabit Ethernet ports support 10 Mbit/s, 100 Mbit/s, and 1000 Mbit/s auto-sensing

Product Function


Network management			Layer 3 features
<ul style="list-style-type: none"> Visualized management User-defined bandwidth allocation Wi-Fi Optimization & Wi-Fi Roaming Wi-Fi O&M Intelligent identification and anti-jamming Tunnel data forwarding using control and provisioning of wireless access points (CAPWAP) in FIT mode Centralized Wi-Fi 6 ONU management and maintenance using the built-in AC of an OLT in FIT mode 			<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
Smart service	Smart interconnection	Smart O&M	
<ul style="list-style-type: none"> Anti-squatter Scheduled Wi-Fi shutdown Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing 	<ul style="list-style-type: none"> Smart Wi-Fi coverage SIP/H.248 auto-negotiation Any port any service 	<ul style="list-style-type: none"> IPTV video quality diagnosis (VMOS&eMDI) Rogue ONT detection and isolation from the OLT Call emulation, and circuit test and loop-line test PPPoE/DHCP simulation testing One-click diagnosis (Web) 	
Multicast	Common O&M	QoS	Security
<ul style="list-style-type: none"> IGMP v2/v3 proxy/snooping IGMP v2/v3 proxy MLD v1/v2 snooping 	<ul style="list-style-type: none"> OMCI/Web UI/TR069 Variable-length OMCI messages Dual-system software backup and rollback 	<ul style="list-style-type: none"> Priority-based data processing and forwarding based on the mapping and priority scheduling rules of Wi-Fi Multimedia (WMM) standards 	<ul style="list-style-type: none"> SPI firewall Anti-DoS attack Filtering based on MAC/IP/URL addresses Supports 802.1X

		<ul style="list-style-type: none"> • Supports WMM power saving mode and Airtime scheduling • Supports Airtime scheduling 	authentication <ul style="list-style-type: none"> • ONU Port-Level Hard-Isolated
WLAN Security			Power saving
<ul style="list-style-type: none"> • Open system authentication • WEP authentication/encryption is supported. The encryption word length is 64-bit or 128-bit • WPA2-PSK authentication/encryption (WPA2 Personal Edition) • WPA2-802.1X authentication/encryption (WPA2 Enterprise Edition) • WPA3-SAE authentication and encryption (WPA3 personal edition) • WPA3-802.1X authentication/encryption (WPA3 Enterprise Edition) • Supports WPA-WPA2 hybrid authentication. • Supports WPA2-WPA3 hybrid authentication • Supports 802.1X authentication and MAC address authentication. • Supports Wi-Fi management frame encryption. 			<ul style="list-style-type: none"> • Indicator power saving • COC V7.1

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