

Huawei OptiXstar V261a-20 Datasheet

Main FTTR for Huawei iFTTR OptiXstar F50 Plus

Overview

Huawei OptiXstar V261a-20 is a main FTTR for the Huawei iFTTR OptiXstar F50 Plus. It uses the GPON and Wi-Fi 7 technologies to implement ultra-broadband access with high performance and wide coverage for users. The high forwarding performance ensures the user experience in voice and data services, and provides users with an ideal all-optical access solution and future-oriented service support capabilities.

- Next-generation Wi-Fi 7 technology, featuring a higher rate and lower latency
- C-WAN architecture, centrally controlling and coordinating network-wide Wi-Fi resources by the main FTTR to deliver ultra-gigabit broadband experience in the whole house
- IoT coffer, safeguarding home network security and privacy
- Youth mode¹ provided to safeguard Internet access by children
- 360-degree coverage and beamforming by built-in smart antennas, ensuring IoT connection reliability
- Vertically placed for less footprint



NOTE

The figures in this document may differ from the actual products. The actual products prevail.

Device Parameters

Dimensions (H x W x D)	148 mm x 240 mm x 30 mm (excluding the base)	System power supply	12 V DC, 2 A
Weight (without power adapter)	About 550 g	Static power consumption	11 W
Installation mode	Vertically placed on a desk NOTE If wall-mounted scenario is involved, the wall-mounted bracket can be customized.	Maximum power consumption	24 W
Memory	256 MB Flash, 512 MB RAM	NNI	GPON
Operating temperature	0°C to +40°C	UNI	1x2.5GE+3xGE+1xPOTS+1xUSB2.0 *+2.4GHz&5GHz Wi-Fi+1xoptical port
Operating humidity	5% to 95% RH, non-condensing	Optical connector	- NNI: SC/APC - UNI: SC/APC
Power adapter input	100 V to 240 V AC, 50/60 Hz	Indicator	- Indicators on front panel - Indicators on rear panel: PON/LOS/4-GE/3-GE/2-GE/1-2.5GE/USB/TEL/WLAN/WPS/FT TR

NOTE

*: A plug-and-play USB port reserved for users.

Interface Parameters

GPON	Wi-Fi
- Class B+ - Receiver sensitivity: -27dBm - Overload optical power: -8 dBm - Wavelengths: US 1310 nm, DS 1490 nm - Wavelength blocking filter (WBF) - Flexible mapping between GEM ports and T-CONTs - Authentication mode: SN/Password/SN + Password - Forward error correction (FEC) function in the upstream and downstream directions - SR and NSR DBA - Upstream and downstream rate: 1.244 Gbit/s upstream, 2.488 Gbit/s downstream	- IEEE 802.11 b/g/n/ax/be (2.4GHz) - IEEE 802.11 a/n/ac/ax/be (5GHz) 2x2 MIMO (2.4GHz&5GHz) - WMM(Wi-Fi Multi Media) 4096 QAM 160 MHz bandwidth - WPA3/WPA2/WPA1 - MU-MIMO - MLO (Multi-Link Operation) - Multi-RU - Multiple SSIDs - WPS - Air interface rate: 688 Mbit/s(2.4GHz); 2882 Mbit/s(5GHz)
	Ethernet port
	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 10 Mbit/s, 100 Mbit/s and 1000 Mbit/s auto-sensing • 2.5GE port supports 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s and 2500 Mbit/s auto-sensing
POTS port	Downstream optical port • P2MP optical port • Theoretic upstream rate: 1.244 Gbit/s; theoretic downstream rate: about 2.488 Gbit/s • Plug-and-play sub FTTR USB port • USB2.0 • FTP-based network storage • File/Print sharing based on SAMBA • DLNA function
• Maximum 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)	

Product Function

Smart interconnection	Smart O&M	Multicast	Layer 3 features
• Smart Wi-Fi coverage • SIP/H.248 auto-negotiation • Any port any service • Parental control	• IPTV video quality diagnosis • Rogue ONT detection and isolation from the OLT • WLAN simulation • PPPoE/DHCP simulation testing	• IGMP v2/v3 snooping • IGMP v2/v3 proxy • MLD v1/v2 snooping	• 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
Security	Common O&M	QoS	Power saving
• SPI firewall • Anti-DOS attack • Filtering based on MAC/IP/URL addresses	• OMCI/Web UI/TR069 • Variable-length OMCI messages • Dual-system software backup and rollback	• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation	• Indicator power saving • TWT energy saving
Home network	Home network management		
• Fiber to the room, implementing all-optical home networking • C-WAN architecture, centrally controlling and coordinating network-wide Wi-Fi resources by the main FTTR • Home Wi-Fi slicing and ONT cross-network acceleration assurance	Supports the following functions with NCE: • Visualized home network management • Remote management and maintenance on a mobile app		

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| <ul style="list-style-type: none">• Intelligent Wi-Fi optimization for a home network• Seamless Wi-Fi roaming within a home network (802.11k/802.11v²) | |
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NOTE

1. The youth mode needs to be used together with NCE and the user app.
2. The 802.11k/802.11v technology must also be supported by user terminals.

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