

Huawei OptiXstar MA5621E Datasheet

Case-shaped industrial ONU

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Product Overview

The OptiXstar MA5621E is case-shaped ONU in Huawei's industrial optical network solution. The network side provides two GPON upstream ports, and the user side provides eight GE Ethernet ports and four RS232/RS485 serial ports. With high-performance forwarding capabilities, the device provides ideal industrial production network solutions for various, such as electric power, manufacturing and transportation industrial scenarios.

DC Configuration



AC Configuration



Product Highlights

- Industrial-grade design, high reliability, and high protection level
 - Dual GPON upstream transmission
 - Type B/Type C hand-in-hand service protection
 - Surge protection capability of 6 kV in common mode for the Ethernet port
- Easy deployment and O&M
 - Placed on an indoor desktop, installed in a 19 inch cabinet or network box
 - Centralized management on eSight
- 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.

Technical Specifications

Item		Description
NNI		1*GPON SFP + 1*GPON BOB
UNI		8*GE + 4*RS485/RS232 + 1*Alarm
Operating temperature		-40°C to +70°C
Operating humidity		5%RH to 95%RH (non-condensing)
Surge protection specifications		Ethernet port: common mode 6 kV; differential mode 1.5 kV DC power port: common mode 4 kV; differential mode 2 kV AC power port: common mode 6 kV; differential mode 6 kV
Dimensions (W*D*H. Unit: mm)		250 * 180 * 43.6 (without mounting ears) 482.6 * 180 * 43.6 (with 19-inch mounting ears)
Heat dissipation mode		No fans, natural heat dissipation
EMC		Class A
Protection Level		IP40
DC Configuration	System power supply	DC 12 V to 48 V, 2 A NOTE The external power supply system needs to be purchased separately. Huawei 60 W AC power module PAC-60WB is recommended.
	Power Rating	48 V, 2 A
	Weight	About 2.5 kg
	Static power consumption	9 W
	Maximum power consumption	12 W
AC Configuration	Power Rating	100~240 V AC, 50/60 Hz, 0.5 A
	Weight	About 1.7Kg
	Static power consumption	7 W

Item		Description
	Maximum power consumption	9 W

Port Parameters

NNI - GPON Port(1*SFP+1*BOB) <ul style="list-style-type: none"> Port type: SC/UPC Standard compliance: ITU-T G.984, Class B+ Maximum transmission distance: 20 km Transmission rate: RX: 2.488 Gbit/s; TX: 1.244 Gbit/s Optical receiver sensitivity: -27 dBm to -29 dBm Overload optical power: -8 dBm NOTICE If the optical power is higher than the overload optical power, the equipment may be reset or damaged. In this case, please connect an optical attenuator.	UNI - GE Electrical Port <ul style="list-style-type: none"> Port type: RJ-45 Auto ports speed(10/100/1000 Mbit/s)
	UNI - RS485/RS232 Port <ul style="list-style-type: none"> Port type: RJ-45 RS485: complying with TIA/EIA-485, ITU-T V.24, ITU-T V.28 RS232: complying with TIA/EIA-232, ITU-T V.24, ITU-T V.28
	UNI - Alarm <ul style="list-style-type: none"> Connected to the external alarm device or other devices Port type: RJ-45
	PWR Port - DC <ul style="list-style-type: none"> Port type: 2-pin Phoenix terminal

Function List

Automatic Service Provisioning <ul style="list-style-type: none"> Authentication exemption XML/OMCI 	Layer 3 Features <ul style="list-style-type: none"> Default/Static/Policy/Service Route VLAN binding ALG/UPnP/ARP DDNS/DMZ/DNS/NAPT PPPoE/Static IP/DHCP Port mapping/Port trigger IPv6 	Security <ul style="list-style-type: none"> Filtering based on MAC/IP/URL DoS/ARP anti-attacks Device access control 802.1x authentication modes: EAP-MD5, TLS, TTLS, and PEAP Static MAC address binding IPv6/IPv4 firewall ONU Port-Level Hard-Isolated (V500R022C00 and later versions)
Network Protection <ul style="list-style-type: none"> GPON Type B Protection GPON Type C Protection Ring network detection 		
QoS <ul style="list-style-type: none"> Ethernet port rate limitation 802.1p priority SP/WRR/SP+WRR 	Smart O&M <ul style="list-style-type: none"> XML/Web UI Centralized management on eSight Rogue ONT detection and self-regulation PPPoE/DHCP simulation testing Serial port data collection and transmission Transparent transmission of serial port data High temperature alarm and shutdown 	Multicast <ul style="list-style-type: none"> IGMP v2/v3 snooping Dynamic controllable multicast IGMP Proxy MLDv1/MLDv2 snooping
Layer 2 Management <ul style="list-style-type: none"> DHCP Option82 PITP BPDU transparent transmission LLDP/LLDP-MED 		Electricity Industry Standards <ul style="list-style-type: none"> DL 645 DL 698.41 IEC 60870-5-101 IEC 60870-5-102

60 W AC Power Module Specifications (Optional for DC configuration only)

Item	Specification
Appearance	
Input and Output	<p>Input (High-voltage AC/DC integrated):</p> <ul style="list-style-type: none"> • 88 V to 300 V DC (Industrial terminal) • 90 V to 264 V AC (Industrial terminal) <p>Output:</p> <ul style="list-style-type: none"> • 12 V DC (Industrial terminal)
power consumption	60 W
Weight	0.9 Kg
Dimensions (W*D*H)	40 mm * 133 mm * 150 mm
Storage temperature	–40°C to +85°C
Installation mode	DIN guide rail mounting mode
Operating temperature	–40°C to +70°C
Operating humidity	5%RH to 95%RH (non-condensing)


Auxiliary list (delivered with the power module)

Item	Quantity	Description
AC power cable	1pc	<ul style="list-style-type: none"> • Rated voltage: 250 V AC • Rated current: 10 A • Cable length: 1.0 m
Single-wire cord end terminal	3pcs	<ul style="list-style-type: none"> • Cable diameter: 1.5 mm² • Insertion depth: 8 mm

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