

OptiXstar T863E-D Datasheet

Industrial ORE

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Product Overview

The OptiXstar T863E-D is industrial ORE in Huawei's industrial optical network solution. The network side provides two GPON/XGS-PON upstream ports, and the user side provides eight GE Ethernet ports. With high-performance forwarding capabilities, the device provides ideal industrial production network solutions for various industrial scenarios, such as oil, gas, mining, and manufacturing.



Product Highlights

- Industrial-grade design, high reliability, and high protection level
 - Dual GPON/XGS-PON upstream transmission
 - Type B/Type C service protection
 - Type C switching delay < 30 ms
 - Surge protection capability of 6 kV in common mode for the Ethernet port
 - Dual DC power inputs
- Easy deployment and O&M
 - DIN guide rail mounting mode
 - Centralized management on eSight

Technical Specifications

Dimensions (WxDxH)	75mm x 133mm x 150mm	System power supply	DC 12 V to 60 V, dual power inputs NOTE Huawei 60 W AC power module PAC-60WB is recommended for the external power supply system.
Weight	About 2 kg	Rated voltage and current	DC 56V, 2A
NNI	2*GPON/XGS-PON	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
UNI	8*GE + 2*RS485 + 2*RS232 + 2*DI + 1*DO + 1*USB 2.0	Heat dissipation mode	No fans, natural heat dissipation
Static power consumption	10 W	Operating temperature	-40°C to +70°C
Typical power consumption	11 W	Operating humidity	5%RH to 95%RH (non-condensing)
Maximum power consumption	14 W	Protection Level	IP20
EMC	Class A	-	-

Port Parameters

NNI - GPON/XGS-PON Port <ul style="list-style-type: none">● Port type: SC/UPC● XGS-PON<ul style="list-style-type: none">– SFP+, complying with ITU-T G.9807.1, Class N1/N2– Transmission rate: RX: 9.953 Gbit/s, TX: 9.953 Gbit/s– Optical receiver sensitivity: -28 dBm	UNI - RS232 Port <ul style="list-style-type: none">● Port type: RJ-45● Complying with TIA/EIA-232, ITU-T V.24, ITU-T V.28
	UNI - RS485 Port <ul style="list-style-type: none">● Port type: RJ-45● Complying with TIA/EIA-485, ITU-T V.24, ITU-T V.28
	UNI - DI/DO

<ul style="list-style-type: none"> Overload optical power: -8 dBm GPON <ul style="list-style-type: none"> SFP, complying with ITU-T G.984, Class B+ Transmission rate: RX: 2.488 Gbit/s, TX: 1.244 Gbit/s Optical receiver sensitivity: -27 dBm Overload optical power: -8 dBm <p>NOTICE</p> <p>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.</p>	<ul style="list-style-type: none"> The DI is connected to devices such as the door status sensor, infrared sensor or other devices The DO is connected to the external alarm device or other devices DI port type: 4-pin Phoenix terminal DO port type: 3-pin Phoenix terminal
<p>UNI - GE Electrical Port</p> <ul style="list-style-type: none"> Port type: RJ-45 Complying with IEEE 802.3a Auto ports speed(10/100/1000 Mbit/s) 	<p>UNI - USB Port</p> <ul style="list-style-type: none"> USB2.0 Port type: TYPE-A Work mode: Host
	<p>PWR Port - DC</p> <ul style="list-style-type: none"> Port type: 2-pin Phoenix terminal

Function List

<p>Automatic Service Provisioning</p> <ul style="list-style-type: none"> Authentication exemption XML/OMCI 	<p>Layer 3 Features</p> <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 	<p>Security</p> <ul style="list-style-type: none"> Filtering based on MAC/IP/URL DoS/ARP anti-attacks Web session number restriction Device access control 802.1x authentication modes: EAP-MD5, TLS, TTLS, and PEAP Static MAC address binding IPv6/IPv4 firewall
<p>Network Protection</p> <ul style="list-style-type: none"> Type B Protection Type C Protection Ring network detection 		
<p>QoS</p> <ul style="list-style-type: none"> Ethernet port rate limitation 802.1p priority SP/WRR/SP+WRR 	<p>Smart O&M</p> <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 	<p>Multicast</p> <ul style="list-style-type: none"> IGMP v2/v3 snooping Dynamic controllable multicast IGMP Proxy MLDv1/MLDv2 snooping
<p>Layer 2 Management</p> <ul style="list-style-type: none"> DHCP Option82 PITP BPDU transparent transmission LLDP/LLDP-MED 		<p>Electricity Industry Standards</p> <ul style="list-style-type: none"> DL 645 DL 698.41 IEC 60870-5-101 IEC 60870-5-102 <p>Industrial Ethernet Protocol</p> <ul style="list-style-type: none"> Ethernet/IP PROFINET MODBUS-RTPS EPA

60 W AC Power Module Specifications

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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