

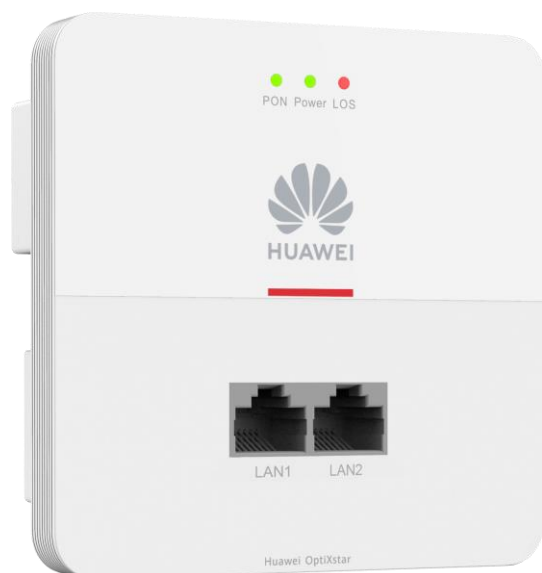
# Huawei OptiXstar P871E Datasheet

Enterprise-Level Routing Gateway ONU

## Product Overview

Huawei OptiXstar P871E is a panel ONU for enterprise campuses. They can be quickly installed on the 86-type electric box. Provides one XGS-PON port in the upstream direction and two GE Ethernet ports on the user side. The high-performance forwarding capability effectively ensures data and HD video service experience, providing an ideal solution for enterprise campus deployment and future-oriented service support.

- Compact design, plug-and-play, flexible and easy to install
- 802.1x and IPv6/IPv4 firewalls ensure device access security and network security.
- High reliability, supporting type B dual-homing service protection
- 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 diagrams in this document may differ from the actual product.

## Technical Specifications

<b>Dimensions (H x</b>	Panel: 86 mm x 86 mm x 9.5 mm	<b>Weight</b>	168 g
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<b>W x D)</b>	Internal module depth: 35 mm		
<b>Power supply of the entire system</b>	100–240 V AC, 50/60 Hz	<b>Interface</b>	<ul style="list-style-type: none"> <li>Network side: 1*XGS-PON</li> <li>User side: 2*GE</li> </ul>
<b>Static power consumption</b>	4.7 W	<b>Maximum power consumption</b>	7.2 W
<b>Optical fiber interface</b>	SC/UPC, XGS-PON upstream transmission	<b>Button</b>	Reset button and indicator switch
<b>Storage</b>	128 MB FLASH, 512 MB DRAM	<b>Installation mode</b>	Indoor 86-box installation
<b>Operating ambient temperature</b>	-5°C - 40°C	<b>Operating ambient humidity</b>	5% RH to 95% RH, non-condensing
<b>Protection rating</b>	IP20	<b>Surge Protection Specifications</b>	<ul style="list-style-type: none"> <li>GE: 4 kV in common mode and 0.5 kV in differential mode</li> <li>AC power supply: 6 kV in common mode and 4 kV in differential mode</li> </ul>

## Port Parameters

<b>XGS-PON port</b>	<b>GE port</b>
<ul style="list-style-type: none"> <li>Interface type: SC/UPC</li> <li>Transmission rate: Downstream: 9.953 Gbit/s; Upstream: 9.953 Gbit/s</li> <li>Receiver sensitivity: -28 dBm</li> <li>Overload optical power: -9 dBm</li> </ul> <p><b>NOTICE</b></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"> <li>Interface type: RJ-45</li> <li>10/100/1000 Mbit/s interface rate auto-sensing</li> <li>Half-duplex/full-duplex mode negotiation and configuration</li> <li>MDI/MDIX automatic configuration</li> <li>Configuring the Number of Learned MAC Addresses</li> <li>Ethernet port-based VLAN transparent transmission and filtering</li> </ul>

## Function List


<b>Automatic Service Provisioning</b>	<b>Smart O&amp;M</b>	<b>Multicast</b>
<ul style="list-style-type: none"> <li>Authentication exemption</li> <li>XML/OMCI/TR069</li> </ul>	<ul style="list-style-type: none"> <li>Variable-length OMCI messages</li> <li>Rogue ONT detection and self-regulation</li> <li>Ring network detection/PPPoE/DHCP simulation testing</li> </ul>	<ul style="list-style-type: none"> <li>IGMP v2/v3 snooping</li> <li>MLDv1/MLDv2 snooping</li> <li>Quickly leave</li> <li>Downstream multicast VLAN translation/transparent transmission/stripping</li> <li>IGMP/MLD packet rate limitation</li> </ul>
<b>QoS</b>	<b>Common O&amp;M</b>	<b>Security</b>
<ul style="list-style-type: none"> <li>Ethernet port rate limitation</li> </ul>	<ul style="list-style-type: none"> <li>OMCI/Web UI</li> </ul>	<ul style="list-style-type: none"> <li>MAC filtering</li> <li>ONU Port-Level Hard-</li> </ul>

<ul style="list-style-type: none"> <li>• 802.1p priority</li> <li>• SP/WRR/SP+WRR</li> <li>• Broadcast packet rate limitation</li> <li>• Flow mapping based on VLAN, 802.1p, Ethernet port, or any combination of VLAN, 802.1p, and Ethernet port</li> </ul>	<ul style="list-style-type: none"> <li>• Software dual backup and rollback</li> <li>• Optical link measurement and diagnosis</li> <li>• Loop detection</li> </ul>	Isolated(V500R022C00 and later version)
		<b>Power saving</b>
		<ul style="list-style-type: none"> <li>• Indicator power saving</li> <li>• Power consumption reduction of idle components in power-saving state</li> </ul>

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