

# Huawei OptiXstar P612E-E Datasheet

Enterprise-Level Routing Gateway ONU

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## Product Overview

The Huawei OptiXstar P612E-E is an ONU designed for scenarios such as enterprise campus and video backhaul. It provides 4 GE ports that support PoE/PoE+. These ports provide high-quality voice, data, and HD video services.



## Product Highlights

- 802.1x and IPv6/IPv4 firewalls ensure device access security and network security.
- Supports -40° C to +55° C wide temperature range with strong environment adaptability.
- The PoE/PoE+ function supports flexible power supply.
- Features high reliability, and supports type B service protection.
- 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

|                              |   |  |   |
|------------------------------|---|--|---|
| <b>Dimensions (WxDxH)</b>    | 220mm x 150mm x 35mm(Without floor mat) | <b>NNI</b>                             | GPON  |
| <b>Operating temperature</b> | -40°C to +55°C                          | <b>UNI</b>                             | 4*GE, support PoE/PoE+.                         |
| <b>Operating humidity</b>    | 5%RH to 95%RH (non-condensing)          | <b>Maximum PoE output power</b>        | Gross power 60W (up to 30W for one GE port)     |
| <b>Power adapter input</b>   | 100V to 240V AC, 50/60Hz                | <b>Surge protection specifications</b> | GE: common mode 6 kV; differential mode 1.5 kV. |

|                                 |                    |                                  |  |
|---------------------------------|--------------------|----------------------------------|--|
|                                 |                    |                                  | AC power: common mode 6 kV;<br>differential mode 6 kV.   |
| <b>System power supply</b>      | 56V DC, 1.42A(80W) | <b>Installation mode</b>         | Can be placed horizontally on a desk, installed under a desk, mounted on a wall, or installed in a cabinet or network box. |
| <b>Static power consumption</b> | 7.5 W              | <b>Maximum power consumption</b> | 9 W (POE port without PD)<br>80 W (POE port with PD having the maximum power consumption)                                  |
| <b>Weight</b>                   | About 1.2kg        | -                                | -  |


## Port Parameters

| GPON   | GE  |
|--|---|
| <ul style="list-style-type: none"> <li>Port type: SC/UPC</li> <li>Complying with ITU-T G.984.2, Class B+</li> <li>Receiver sensitivity: -27dBm</li> <li>Overload optical power: -8dBm;</li> <li>Transmission rate: upstream 1.244 Gbit/s, downstream 2.488 Gbit/s</li> <li>Type B single-homing</li> <li>Type B dual-homing (supported in Layer 2 forwarding)</li> </ul> | <ul style="list-style-type: none"> <li>PoE and PoE+, complying with IEEE 802.3af and IEEE 802.3at</li> <li>Port type: RJ-45</li> <li>Auto ports speed(10/100/1000 Mbit/s)</li> <li>Auto-MDI/MDIX</li> <li>Configuration of the number of MAC addresses learned</li> <li>VLAN transparent transmission/VLAN filtering</li> </ul> |

## Function List

| Automatic Service Provisioning  | Smart O&M  | Layer 3 Features   | Security   |
|---|--|--|--|
| <ul style="list-style-type: none"> <li>Authentication exemption</li> <li>XML/OMCI/TR069</li> </ul>  | <ul style="list-style-type: none"> <li>XML/Web UI</li> <li>Rogue ONT detection and self-regulation</li> <li>Ring network detection</li> <li>PPPoE/DHCP simulation testing</li> </ul> | <ul style="list-style-type: none"> <li>Default/Static/Policy/Service routes</li> <li>VLAN binding</li> <li>ALG/UPnP/ARP</li> <li>DDNS/DMZ/DNS/NAPT</li> <li>PPPoE/Static IP/DHCP</li> <li>Port mapping/Port trigger</li> <li>IPv6</li> </ul> | <ul style="list-style-type: none"> <li>802.1x</li> <li>IPv6/IPv4 firewalls</li> <li>Filtering based on MAC/IP/URL</li> <li>DoS/ARP anti-attacks</li> <li>Static MAC address binding</li> <li>Device access control</li> <li>ONU Port-Level Hard-Isolated (V500R022C00 and later versions)</li> </ul> |
| Multicast   | QoS  | Layer 2 Management   |  |
| <ul style="list-style-type: none"> <li>IGMP v2/v3 snooping</li> <li>Dynamic controllable multicast</li> <li>IGMP proxy</li> <li>MLDv1/MLDv2 snooping</li> </ul> | <ul style="list-style-type: none"> <li>Ethernet port rate limitation</li> <li>802.1p priority</li> <li>SP/WRR/SP+WRR</li> </ul>  | <ul style="list-style-type: none"> <li>DHCP Option82</li> <li>PITP</li> <li>BPDU transparent transmission</li> <li>LLDP/LLDP-MED</li> </ul>  |  |


# 80 W Power Adapter Specifications

| Specification               | Power Adapter  |
|-----------------------------|--|
| Appearance                  |    |
| Dimensions                  | 152 mm (length) x 67 mm (width) x 38 mm (height)   |
| Power supply specifications | Input voltage: 100–240 V AC, 50 Hz/60 Hz<br>Rated output voltage/current: 56 V DC/1.42 A<br>Input/Output connector type: C14/DC straight audio plug 5521 |
| Power                       | 80 W   |
| Weight                      | 0.45 Kg  |
| Installation mode           | Desktop  |
| Operating temperature       | –40°C to +55°C   |
| Power cable                 | Specifications: 2464-22 AWG<br>Cable length: 1.5 m   |

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