# ONU (Optical Network Unit)
# GPON/EPON EAAXZ-1GE

## Zion Code and Description

| Zion Code | Zion Description |
|---|---|
| 7221002 | ONU GPON/EPON EAAXZ-1GE |

## Features

- GPON working mode Compliance with IEEE 802.3ah & itu-t g.984.x standard
- Chipset: ZTE Chipset
- GPON:8 T-CONTs,32 GEM Ports
- EPON working mode compliant with IEEE 802.3ah specification and OAM protocol
- Supports the WEB configuration function
- Support SFU and HGU types, can switch to use each other
- HGU type,Support PPPoE/ Static IP/ DHCP
- Layer 2 Switching, support 802.1Q VLAN, 802.1P QOS, Bandwidth Control, Spanning Tree, etc
- Layer 3 Home Gateway/CPE features with Hardware NAT, supports Route mode, etc
- Supports the configuration of Ethernet interface rates, working modes,MDI/ MDIX auto-negotiation mode, and Pause flow control
- Provides performance statistics on all Ethernet lines
- Support multicast IGMP snooping
- Supports the L2 wire speed forwarding
- Supports the AES-128 algorithm for data encryption of downlink data

## Applications

This type ONU is a user terminal device independently developed by ZION COMMUNICATION based on this industry background. The device has built-in two-layer switching function. Small and compact, it is a high-performance, low-power FTTH optical network unit. The ONU can automatically switch the EPON/GPON working mode and can be used in EPON/GPON networks, which is very suitable for the following application requirements. Various data services under various operator FTTH networking scenarios.

## Description

A passive optical network (PON) is a fiber-optic telecommunications technology for delivering broadband network access to end customers. Its architecture implements a point-to-multipoint topology in which a single optical fiber serves multiple endpoints by using unpowered (passive) fiber optic splitters to divide the fiber bandwidth among the endpoints. Passive optical networks are often referred to as the last mile between an Internet service provider (ISP) and its customers.

## Zion Communication's Hot ONU types

| Zion Code | Zion Description |
|---|---|
| 7221002 | ONU GPON/EPON EAAXZ-1GE |
| 7221044 | ONU XPON BCCXR 2GE+1USB+2.4G+5GWIFI |
| 7221071 | ONU XPON GAAXR 4GE+1USB+2VOIP+2.4G+5GWIFI+CATV |
| 7221075 | ONU XPON GFBXR 4GE+1USB+1VOIP+2.4G+5GWIFI |
| 7221162 | ONU GPON FOAGB 1GE+3FE+USB+1VOIP+2.4GWIFI |
| 7221167 | ONU GPON FBBGM 1GE+3FE+2USB+1VOIP+2.4G+5GWIFI |
| 7221210 | ONU EPON ABEE 1GE |

# Detailed product specifications

## 1 Hardware Specifications

| | |
|---|---|
| Size（L*W*H） | 90mm (L) ×90mm (W) ×24mm (H) |
| Optical signal access | EPON/GPON |
| User interface | 1GE |
| Indicator light | POWER/PON/LOS/LAN |
| Button | Power switch Button, Reset Button |
| Weight | 95g |
| Power adapter input | 100V～240V AC，50Hz～60Hz |
| PowerSupply requirement | 12V DC，0.5A |
| Power consumption | <6w |
| Working temperature | -10°C ~ +45°C |
| Environment humidity | 5% ~ 95% (Non-condensing) |
| | |

## 2 PON Interface

| | |
|---|---|
| Module type | SC/UPC |
| Working wavelength | up 1310nm，down 1490nm |
| TX Optical power value | 0.5～4dbm |
| RX Optical power sensitivity | -27dBm |
| Transmission distance | 0～20km |
| Transmission rate | GPON:Uplink 1.244Gbps；downlink 2.488Gbps<br>EPON:Uplink 1.244Gbps；downlink 1.244Gbps |
| | |

## 3 Ethernet interface

| | |
|---|---|
| Interface type | RJ45 |
| Interface parameters | 1 x 10/100/1000Mbps auto adaptive Ethernet interfaces |