

## 1. Introduction

### 1.1. Product Description

G/EPON 1GE Safe ONU is support Dual mode(EPON and GPON), It can also be applied to a wide temperature environment, and also has a powerful firewall function.

G/EPON 1GE ONU meets telecom operators FTTO (office), FTTD (Desk), FTTH(Home) broadband speed, SOHO broadband access, video surveillance and other requirements and design a GPON/EPON Gigabit Ethernet products. The box is based on the mature Gigabit GPON/EPON technology, highly reliable and easy to maintain, with guaranteed QOS for different service. And it is fully compliant with technical regulations such as ITU-T G.984.x and IEEE802.3ah.



Figure 1 G/EPON 1GE ONU

### 1.2 Product categories

Product model	Product specification	SDRAM Memory
ZX8101L	1 G/EPON+1GE	32MB

Table 1 Product categories

### 1.3 Application Chart

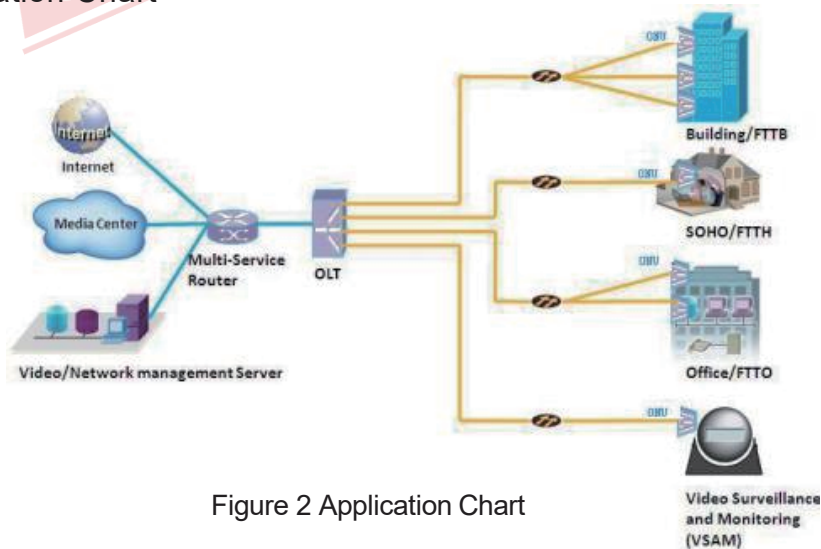


Figure 2 Application Chart

### 1.4 Technical parameters

Product model	1GE
PON interface	1 G/EPON port(EPON PX20+ and GPON Class B+) Wavelength:Tx1310nm,Rx 1490nm SC/UPC connector Receiving sensitivity: ≤-28dBm Transmitting optical power: 0~+4dBm Transmission distance: 20KM
LAN interface	1 x 10/100/1000Mbps auto adaptive Ethernet interfaces.10/100/1000M Full/Half, RJ45 connector
LED	3, For Status of REG、SYS、LINK/ACT
Operating condition	Temperature: -30°C~+70°C Humidity: 10%~90% (non-condensing)
Storing condition	Temperature : -30°C~+70°C Humidity :10%~90% (non-condensing)
Power supply	DC 12V/0.5A(option)
Power consumption	≤4W
Dimension	82mm×82mm×25mm (L×W×H)
Net weight	85g

Table 2 Technical parameters

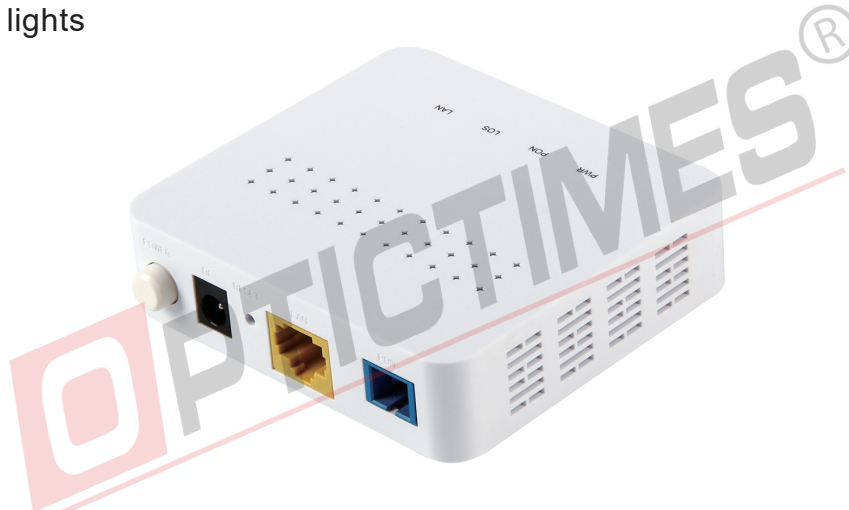
### 1.5 Panel lights



LED	Mark	Color	Status	Description
system	SYS	Green	on	Device is powered on and starting.
			Blink	Device is running normally.
			Off	Device is powered off.
Optical signal state	REG	Yellow	Blink	Device is not registered to the PON system.
		Green	Blink	Device is being registered.
		Green	on	Device is registered to the PON system.
Interface	LINK/ACT	Green	on	Port is connected properly .
			Off	Port connection exception or not connected.
			Blink	Port is sending or/and receiving data.

Table 3 Panel lights on

### 1.6 Panel lights



Port Type	Function
PON	Connect PON port with internet by SC/UPC type, single mode optical fiber cable.
LAN	Connect device with ethernet port by RJ-45 cat5 cable.
RST	Press down reset button and keep 1-5 seconds to make the device restart and recover from the factory default settings.
DC12V	Connect with power adapter.

Table 4 Interface description

### 1.7 Software Key Feature

Software Key Feature	
EPON/GPON mode	Dual mode , Can access EPON/GPON OLTs.
Software mode	Bridging mode and Routing mode.
Abnormal protection	Detecting Rogue ONU, Hardware Dying Gasp.
Firewall	DDOS, Filtering Based on ACL/MAC/URL.
Layer2	802.1D&802.1ad bridge, 802.1p Cos, 802.1Q VLAN.
Layer3	IPv4/IPv6, DHCP Client/Server , PPPoE, NAT , DMZ ,DDNS.
Multicast	IGMP v1/v2/v3 , IGMP snooping.
Security	Flow & Storm control, Loop Detection.
O&M	WEB/TELNET/OAM/OMCI/TR069.

Table 5 Software Key Feature

