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	Chipset
V2801SG	1 G/EPON+1GE	ZTE

Table 1 Product categories

1.3 Application Chart

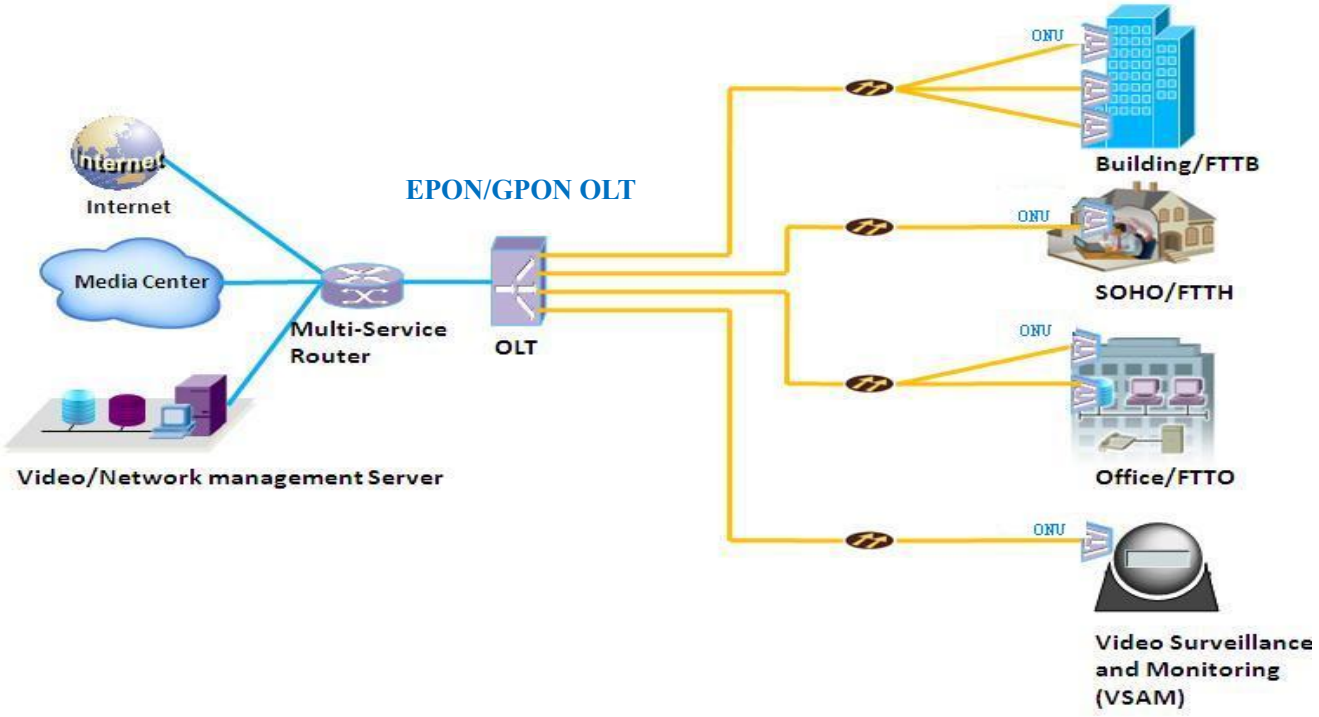

Figure 2 Application Chart

1.3 Technical parameters

Technical item	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℃～+70℃ Humidity: 10%～90%（non-condensing）
Storing condition	Temperature : -30℃～+70℃ 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

1.4 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 Interface description

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 keep1-5seconds 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, 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

Table 5 Software Key Feature

1.8 Software Parameters

Parameter Name	Software Parameters
Basic	Support MPCP discover&register Support authentication Mac/Loid/Mac+Loid Support Triple Churning Support DBA bandwidth Support auto-detecting, auto-configuration, and auto firmware upgrade Support authentication SN/Psw/Loid/Loid+Psw
Alarm	Support Dying Gasp Support Port Loop Detect Support Eth Port Los
LAN	Support Port rate limiting Support Loop detection Support Flow control Support Storm control
VLAN	Support VLAN tag mode Support VLAN transparent mode Support VLAN trunk mode(max 8 vlans) Support VLAN 1:1 translation mode(max 8 vlans) Auto VLAN detection
Multicast	Support IGMPv1/v2 Support IGMP Snooping Max Multicast vlan 8 Max Multicast Group 64
QoS	Support 4 queues Support SP and WRR Support 802.1P
L3	Support IPv4 Support DHCP/PPPOE/Static IP Support Static route Support NAT
Management	Support CTC OAM 2.0 and 2.1 Support ITUT984.x OMCI Support WEB Support TELNET Support CLI
Throughput	Upstream >900Mbps Downstream >960Mbps
Packet lost	14Hours /Lost 0