Introduction

1.1 Product Description

G/EPON 1GE+WiFi 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+WiFi 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.

Dual mode

Antenna 5dBi

Routing ONU

Figure 1　G/EPON 1GE+WiFi ONU

1.2 Product categories

Product model	Product specification	Chipset	SDRAM Memory
V2801RW	1 G/EPON+1GE+WiFi	Realtek	64MB

Table 1 Product categories

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1.3 Application Chart

EPON/GPON OLT
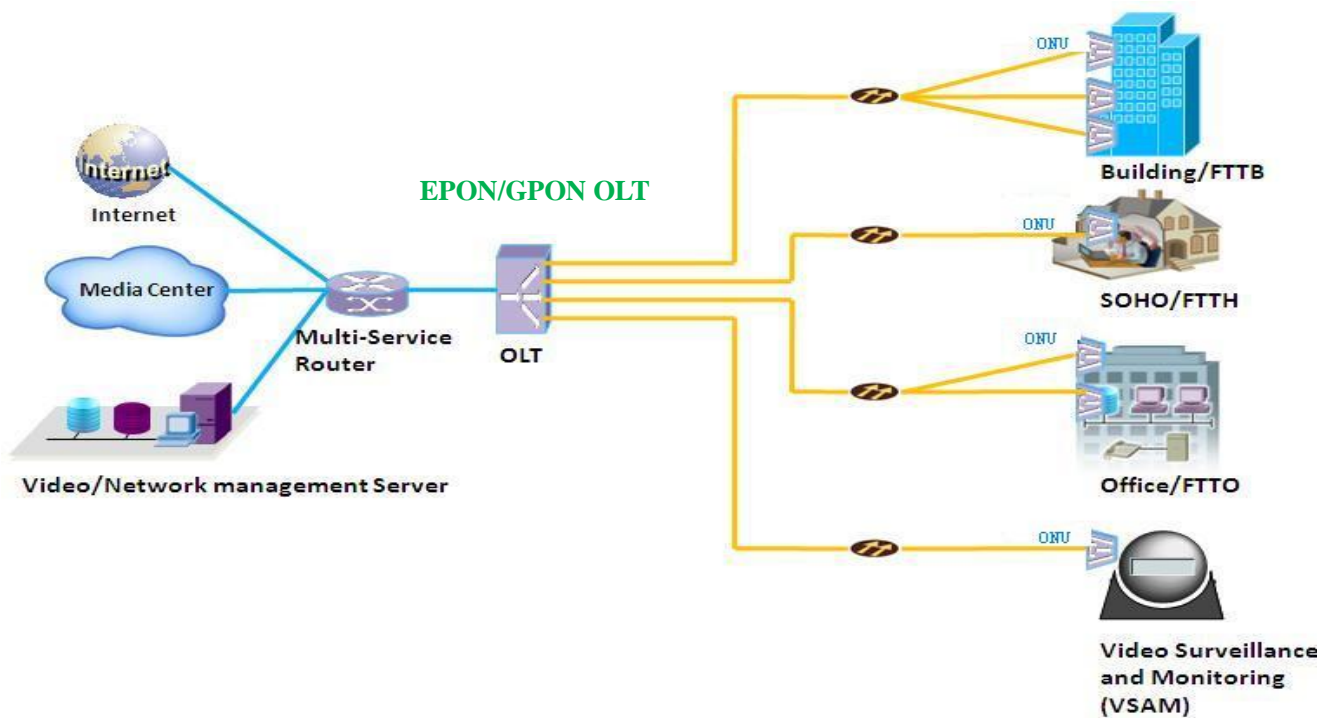
Figure 2   Application Chart

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
WiFi interface	Compliant with IEEE802.11b/g/n Operating frequency: 2.400-2.4835GHz support MIMO, rate up to 300Mbps 2T2R,2 external antenna 5dBi Support: multiple SSID Channel:13 Modulation type: DSSS、CCK and OFDM Encoding scheme: BPSK、QPSK、16QAM and 64QAM
LED	5, For Status of POWER、LOS、PON、LAN、WiFi
Operating condition	Temperature: 0℃～+50℃ Humidity: 10%～90%（non-condensing）
Storing condition	Temperature : -30℃～+60℃ Humidity :10%～90%（non-condensing）
Power supply	DC 12V/0.5A

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Power consumption	≤6W
Dimension	120mm×78mm×30mm（L×W×H）
Net weight	0.13Kg

Table 2 Technical parameters

1.4 Panel lights

LED	Mark	Status	Description
Power	POWER	On	The device is powered up.
		Off	The device is powered down.
Optical signal loss	LOS	Blink	Device does not receive optical signals.
		Off	Device has received optical signal.
Registration	REG	On	The device is registered to the PON system.
		Off	Device is not registered to the PON system.
		Blink	Device registration is incorrect.
Interface	LINK/ACT	On	Port is connected properly (LINK).
		Off	Port connection exception or not connected.
		Blink	Port is sending or/and receiving data (ACT).
WiFi	WiFi	On	WiFi running
		Off	WiFi not working

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.
Power ON/OFF	Power on and Power off
DC12V	Connect with power adapter.

Table 4 Interface description

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1.7 Software Key Feature

Software Key Feature	
EPON/GPON mode	Dual mode , Can access EPON/GPON OLTs(HUAWEI、ZTE、FiberHome).
Software mode	Routing mode.
WiFi	IEEE802.11b/g/n(TX power:17dBm/16dBm/15dBm) WiFi Authentication : WEP/WAP-PSK(TKIP)/WAP2-PSK(AES)
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

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