SY-GPON-2010-WADONT

Overview:

2GE+POTS AC WiFi XPON HGU terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators. These boxes are based on the mature Chipset (Realtek) technology, which have high ratio of performance to price, and the technology of IEEE802.11b/g/n/ac WiFi, Layer 2/3,. They are highly reliable and easy to maintain, with guaranteed QoS for different service. And they are fully compliant with technical regulations such as IEEE802.3ah、ITU-T G.984.x and technical requirement of GPON Equipment

Hardware features:

PON interface	1 G/EPON port(EPON PX20+ and GPON Class B+) Wavelength:Tx1310nm,Rx 1490nm SC/UPC connector Receiving saturation:≥-8dBm Receiving sensitivity: ≤-28dBm Transmitting optical power: 0~+4dBm Transmission distance: 20KM
LAN interface	2×10/100/1000Mbps auto adaptive Ethernet interfaces. Full/Half, RJ45 connector
Wireless	Compliant with IEEE802.11b/g/n/ac 2.4GHz Operating frequency: 2.400-2.483GHz 5.0GHz Operating frequency: 5.150-5.825GHz Support MIMO, 2T2R,5dBi external antenna, rate up to 1.167Gbps Support: multiple SSID TX power: 11n--22dBm/11ac--24dBm
POTS interface	1×FXS, RJ11 connector Support: G.711/G.723/G.726/G.729 codec Support: T.30/T.38/G.711 Fax mode, DTMF Relay Line testing according to GR-909
LED	12, For Status of PWR,PON ,LOS,WAN,WiFi,FXS,ETH1~4,WPS .
Operating condition	Temperature: 0℃～+50℃ Humidity: 5%～90%（non-condensing）
Storing condition	Temperature : -30℃～+75℃ Humidity :5%～90%（non-condensing）
Power supply	DC 12V,1/1.5A
Power consumption	≤10W
Dimension	205mm×140mm×37mm （L×W×H）
Net weight	0.34Kg

LED Indicators of Device

Indicators	Status	Description
POWER	Light on	ONU power supply normally
	Light off	ONU no power supply

PON	Light on	ONU link active
	Flash	ONU manage to link
	Light off	ONU receiving power rate lower than optical receiver sensitivity
LOS	Blink	Device does not receive optical signals.
	off	Device has received optical signal.
2.4G	ON	WiFi turn on
	OFF	Device is power off or WiFi turn off
	Blink	WiFi turn on and with ongoing data transmission
5G	ON	WiFi turn on
	OFF	Device is power off or WiFi turn off
	Blink	WiFi turn on and with ongoing data transmission
INTERNET	On	Internet is effective.
	Off	Internet is ineffective.
ETH1 & 2	Light on	Network port linked, but no data transmitting
	Flash	Network port data pass
	Light off	ONU no power supply or internet cable unlink
POTS	On	Device has registered to the soft-switch, but without ongoing data transmission.
	Off	Device is power off or not registered to the soft-switch.
	Blink	Phone hooks off or the port is with ongoing data transmission.

Technical Specifications:

3.1 Physical structure, Environment and Electrical parameter

Table 3-1 specification and working environment

Parameter	Nominal
Dimension	178mm×120mm×30m(L×W×H)
Net weight	0.24kg
Typical power consumption	<10W
Noise	None
Cooling style	Naturally cooling
Power supply	12V DC/1A （By external AC/DC adapter）
Installation style	Support PC, wall mount or put inside of information box.
Environment	0~45deg
Atmospheric pressure	70~106Kpa
MTBF	50,000hours
MTTR	30minutes
Parameter	Nominal

GPON Interface Specifications:

Table 3-2 GPON Interface

Parameter	Nominal
Connector style	SC/UPC
PON quantity	1
Fiber style	Single mode
Wavelength	TX：1310 +/-20nm RX：1490 +/-10nm
PON interface standard	ITU-T G.984.2/ITU-T G.984.3/ITU-TG.988 Class B+
PON interface receiving rate	1.244Gpbs
PON interface transmitting rate	2.488Gpbs
Output optical power	Min: 0dBm Max: +5dBm
Optical receiver sensitivity	Precede -28dBm
The length of the optical link	Max 20km

WiFi Specifications:

Table 3-3 WIFI Specifications

	Standard	IEEE 802.11 ac/b/g/n
WiFi Parameter	Frequency	2.4~2.4835GHz 5GHz： Low frequency 5.15GHz～5.25GHz、 Middle frequency 5.25GHz～5.35GHz、 High frequency 5.725GHz～5.825GHz
	Transmission speed	2.4GHz Frequency: IEEE 802.11b ：11/5.5/2/1M(Auto) IEEE 802.11g：54/48/36/24/18/12/9/6(Auto) IEEE 802.11n：270/243/216/162/108/81/54/27Mbps,up to 300Mbps
		5GHz Frequency: IEEE 802.11ac ：Highest transmission speed up to 867Mbps
	Channel number	2.4GHz ：13 5GHz：4
	Spread-spectrum Technique	DSSS(Direct sequence spread spectrum)
	Data Modulation	DBPSK、DQPSK、CCK and OFDM(BPSK/QPSK/16-QAM/64-QAM)
	Sensitivity @PER (Package error rate)	270M：-68dBm@10% PER；130M： -68dBm@10% PER； 108M：-68dBm@10% PER；54M：-68dBm@10% PER 11M：-85dBm@8% PER；6M：-88dBm@10% PER 1M：-90dBm@8% PER；
	RF power	20dBm EIRP
	Antenna	5dBi Antennas

Software Function:

- Support rich QinQ VLAN functions and IGMP Snooping multicast features
- Fully compatibility with OLT based on Broadcom/PMC/Cortina chipset
- Support 802.11n/ac WiFi(2T2R) function
- Support NAT, Firewall function
- Support IPv4 and IPv6 dual stack
- Full speed non-blocking switching
- 2K MAC address table
- 64 full range VLAN ID
- Support QinQ VLAN, 1:1 VLAN, VLAN reusing, VLAN trunk, etc
- Integrated port monitoring, port mirroring, port rate limiting, port SLA, etc
- Support auto polarity detection of Ethernet ports (AUTO MDIX)
- Integrated IEEE802.1p QoS with four level priority queues
- Support IGMP v1/v2/v3 snooping/proxy and MLD v1/v2 snooping/proxy
- Support bridge, router and bridge/router mixed mode
- Support TR-069 protocol