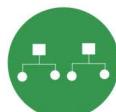




**Dual mode**



**HGU management**



**Route**

## Product overview

1GE+1FE+1POTS+WiFi+1RF GPON/EPON 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, and high quality VoIP as well. Support full management of HGU devices through OLT. 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 (V2.0 and above version) from China Telecom.

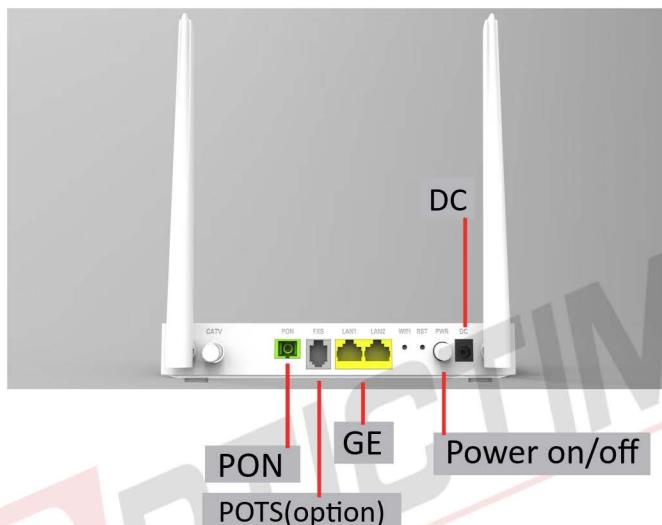
Series	Uplink interface	User interface
ZX8102W	1*EPON/GPON	1GE+1FE+WiFi
ZX8112W	1*EPON/GPON	1GE+1FE+1POTS+WiFi
ZX8102WT	1*EPON/GPON	1GE+1FE+WiFi+1RF
ZX8112WT	1*EPON/GPON	1GE+1FE+1POTS+WiFi+1RF

## Special Features

- Support full management of HGU functions by OLT
- Plug and play, features auto-detecting, auto-configuration, and auto firmware upgrade , etc
- Integrated OAM/OMCI remote configuration and maintenance function
- Support rich QinQ VLAN functions and IGMP Snooping multicast features

- Fully compatibility with OLT based on Broadcom/PMC/Cortina chipset
- Support TR069 one-key batch configuration
- Support 802.11 b/g/n WiFi(2T2R) function
- Support NAT, Firewall function
- Support IPv4 and IPv6 dual stack
- Support SIP protocol
- Integrated line testing compliant with GR-909 on POTS

## Functional characteristics



## Technical indicator

Technical item	1GE+1FE+WiFi
PON interface	1 G/EPON port(EPON PX20+ and GPON Class B+) Receiving sensitivity: ≤-28dBm Transmitting optical power: 0～+4dBm Transmission distance: 20KM
Wavelength	Tx1310nm,Rx 1490nm
Optical interface	SC/APC connector
LAN interface	1 x 10/100/1000Mbps and 1 x 10/100Mbps auto adaptive Ethernet interfaces. Full/Half, RJ45 connector
POTS interface (option)	1xRJ11connectors Support:G.711A/G.711U/G.723/G.729codec Support:T.30/T.38/G.711Faxmode,DTMFRelay

WiFi interface	Compliant with IEEE802.11 b/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 5dBi
LED	8, For Status of POWER、PON、LOS、LAN2、LAN1、WiFi 、FXS、RF
Operating condition	Temperature: 0°C~+50°C Humidity: 10%~90% (non-condensing)
Storing condition	Temperature: -30°C~+60°C Humidity: 10%~90% (non-condensing)
Power supply	DC 12V/1A
Power supply	≤6W
Dimension	181mm×143mm×30m(L×W×H)
Net weight	0.24Kg

## Software function

### Management Mode

- OAM/OMCI、WEB、TR069
- Support full management of HGU functions by OLT

### Data Service Functions

- 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

## WiFi Service Functions

- Integrated 802.11 b/g/n
- Support max 128 users
- Authentication : WEP/WPA2/WPA2 Mixed/WPA3/WPA2+WPA3 Mixed
- Modulation type: DSSS、CCK and OFDM
- Encoding scheme: BPSK、QPSK、16QAM and 64QAM

## Software function

### POTS Service Function(option)

- Call protocol: SIP(IMS compatible) seamless compatible with all popular call agent
- Integrate heartbeat function and support active/standby call agent
- Voice coding: ITU-T G.711/G.722/G.729, auto-negotiate with call agent
- Echo cancellation exceeding ITU-T G.165/G.168-2002, up to 128ms tail length
- Support high/low speed fax, bypass fax, and T38 fax
- Support high speed MODEM(56Kbps) dial access
- Support RFC2833 and redundant RFC2833, difference rings, MD5 authentication, call forward, call waiting, hot-line call, alarm clock, and all kinds of value-added voice service
- Multi-party conferencing
- IP address assignment: dynamic PPPoE/DHCP Client and static IP
- Support WEB、CLI、IVR、TR069
- Call loss less than 0.01%

