

DNS

Support TR069, NAT
DMZ, DNS features



Support Multiple SSID



Support Multiple VLAN

CAS

Support CAS, L2oGRE



Support IPV6, PPPoE, DHCP
and Static IP configuration for
WAN Interface



Support IP, MAC filtering,
Firewall Functionality in
routed mode



Support for XPON, adaptive
EPON or GPON OLT on the
network



RH821GWV-DG xPON ONT



1. Product Overview

RH821GWV-DG terminal devices are designed for fulfilling FTTH and triple play service demand of fixed network operators or cable operators. The box is based on the mature Gigabit xPON technology, which have high ratio of performance to price. They are highly reliable and easy management and guaranteed QoS. And It is fully compliant with technical regulations such as ITU-T G.984.x and technical requirement of xPON equipment from Telecom.



2. Interface of device

Parameter	Nominal
Connector style	SC/PC
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
Phone	1x FXS RJ-11 ports
LAN	1xGE, 1xFE RJ-45 ports
WPS button	A tact switch
Reset	A tact switch. One reset/restore factory default button
Power button	Power on/off switch
Power supply	DC 12V/1.5A

3. WIFI Specifications

Standard	IEEE 802.11 ac/b/g/n
Frequency	2412~2472MHz
	5GHz:
	Band-1 frequency 5.15GHz~5.25GHz
	Band-2 frequency 5.25GHz~5.35GHz
	Band-3 frequency 5.500GHz~5.700GHz
Transmission speed	Band-4 frequency 5.725GHz~5.825GHz
	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
Channel number	5GHz Frequency
	IEEE 802.11n: Highest transmission speed up to 300Mbps
	IEEE 802.11ac : Highest transmission speed up to 867Mbps
Spread-spectrum Technique	2.4GHz :13 5GHz:4
Data Modulation	DSSS(Direct sequence spread spectrum)
Sensitivity @PER (Packet Error Rate)	DBPSK, DQPSK, CCK and OFDM(BPSK/QPSK/16-QAM/64-QAM)
	270M: -68dBm@10% PER; 130M: -68dBm@10% PER
	108M: -68dBm@10% PER; 54M: -68dBm@10% PER
	11M: -85dBm@8% PER; 6M: -88dBm@10% PER
Transmission Distance	1M: -90dBm@8% PER
	Indoor Maximum 120 meter, Outdoor Maximum 360 meters
	(The distance depends on the environment)
RF power (2.4GHz)	20dBm EIRP
RF power (5 GHz)	Band-1 EIRP 17.45dBm
	Band-2 EIRP 17.82dBm
	Band-3 EIRP 17.92dBm
	Band-4 EIRP 18.92dBm
Antenna	5dBi Antennas

4. Physical structure, Environment and Electrical parameter

Parameter	Nominal
Dimension	107mm×85mm×26mm (L×W×H)
Net weight	0.26kg
Typical power consumption	<7W
Noise	None
Cooling style	Naturally cooling
Power supply	12V DC By external AC/DC adapter)
Installation style	Support PC, wall mount or put inside of information box
Environment	0-45°C
Atmospheric pressure	70-106Kpa
MTBF	50,000hours@25°C
MTTR	30minutes

5. Special function

- Support TR069,NAT,DMZ,DNS features
- Support IGMP multicast and using bandwidth efficiently
- Support Multiple VLAN
- Support network storm control
- Support IPV6 ,PPPoE, DHCP and Static IP configuration for WAN Interface
- Support IP, MAC filtering, Firewall Functionality in routed mode

6. POTS Specifications

- support SIP voice protocol.
- support H.248 voice protocol.
- SIP protocol: ISP provide the port number of the main SIP proxy server and terminal VOIP.
- Value range is 1-65535, system default value is 5060.
- H.248 protocol: ISP provide port number of the spare MGC server and VOIP terminal.
- Value range is 1-65535, system default value is 2944.
- Port ringing current voltage: 50±10VAC, 30±10H.
- Port type POTS(VOIP).
- Support G.711 A-Law/u-Law,G729A/B G.723.1-5.3/6.3 G.726.etc.voice coding/compressed technology.

7. Network Mode

