

GPON

4-port GE | SC/APC | VoIP | RF Overlay (optional)

GRG-4255u GPON Residential Gateway



The GRG-4255u GPON residential gateway is designed to offer triple play (data, voice, and video/IPTV) for FTTH application. The network interface is compliant to ITU-T G.984.5 to provide 2.5 Gb/s downstream and 1.25 Gb/s upstream. The bandwidth is well enough to support high-definition IPTV with data/voice services. It has four Gigabit Ethernet ports and 802.11b/g/n WLAN for home networking. It also has two POTS ports for VoIP application and one USB 2.0 host port for printer server, networking storage, and/or 3G/3.5G backup. The optional RF overlay support CATV video program as value added service for Telco.

SW FEATURES

GPON Compliance

- ITU-T G.984.1, G.984.2, G.984.3, G.984.4
- Fully ITU-T G.984 compliant framing
- Support 8 T-CONTs and 32 GEM Ports

Network Protocol

- 802.1q/1p VLAN over RFC2684 bridge encapsulation
- PPPoE
- PPPoE filtering of non-PPPoE packets between WAN and LAN

Networking

- Full Cone NAT
- DMZ Host

ALGs

- FTP, TFTP, RTSP, Port Triggering, PPTP, IPsec and L2TP

Firewall/Filtering

- Stateful Inspection
- Packet filtering

QoS

- IP/Bridge/802.1p
- Rate Control on upstream traffic
- Support SP, WRR

Routing

- RIP v1/v2, Policy Routing

IGMP

- Proxy and snooping, IGMP v2 and v3

IPv6

- IPv6 Ready Logo Certified, IPv6 Firewall

DHCP Server / client

- Support for multiple subnets
- Static IP lease, DHCP relay

DNS Proxy

- Built in DNS server
- Caching previous requests

UPnP

- Internet Gateway Device (IGDv1.0) Finite(24 hour) duration of virtual server entries created using UPnP

VoIP

- SIP/ MGCP/ H.248 Protocols
- FXS
- Multiple voice codec - G.711 (u/a-law), G.726, G.729 (A and B), G.723.1 etc
- T.30 and T.38 Fax
- DTMF In band & Out of band Tone
- Detection & generation (RFC2833)
- Echo Cancelling, Silence suppression, VAD, CNG
- Various CLASS services - Caller ID, Call Waiting, Call Forwarding, Call Transfer, etc.

Supports TR-069

Supports SNMP

- v1/v2c agent, MIB-II

Others

- Dynamic DNS
- SNTP time synchronization
- Telnet
- Power Management

GRG-4255u

4-port GE | SC/APC | VoIP | RF Overlay (optional)



SPECIFICATIONS

Solution

- Main Chipset BCM68380
- WiFi Chipset BCM43217t
- Flash Memory NAND 1Gbits
- DDR2 for CPU 1Gbits
- VoIP LE9540

Wireless

- 2.4G 2T2R (on board)
- Data Rate : 802.11n:270Mbps (Max.)
802.11g:54Mbps (Max.)
802.11b:11Mbps (Max.)
- Frequency : 802.11b/g/n ISM band: 802.11n 20MHz/40MHz
2.412G~2.462GHz: (FCC) North America (CH1~CH11)
2.412G~2.472GHz: (ETSI/TELEC) EU/Japan (CH1~CH13)
- WiFi Power : (Tolerance +/- 1.5dBm) : IEEE 802.11n
MCS7:14.5 dBm
IEEE 802.11g
6Mbps:14.5 dBm
54Mbps:14.5 dBm
IEEE 802.11b(<=19dBm)
5.5Mbps:17.5 dBm
11Mbps: 17.5 dBm
- Sensitivity : 802.11b: -86 dBm typical @ 11Mbps
802.11g: -72 dBm typical @ 54Mbps
802.11n : -67 dBm typical with 20MHz
802.11n : -65 dBm typical with 40MHz
- Throughput : 802.11n
No Security: >=70 Mbps with 20MHZ @2T2R
No Security: >=100 Mbps with 40MHZ@2T2R
802.11g
No Security: >=18 Mbps

User Interface

- WAN(PON) : 1x GPON ITU-TG.984.x
Fully compliant with IEEE 802.3ah
Plug-and-play
- Ethernet LAN : Four RJ-45 Port (8p8c, Yellow color, unshielded)
10/100/1000Mbps GE
N-way, Automatic speed negotiation supported
Auto-sensing, auto-detection MDI/ MDI-X
- VoIP : Two RJ-11(6p2c), Gray color
- USB : Two USB host
- Reset button : x1
- Power Jack : DC power jack, 12V/1.5A input
- On/Off Switch : x1
- WPS : WPS button
- WiFi button on/off : x1
- Wireless Antenna : Two external Antenna (2.4G x2)
- RF : One RF interface

Power

- Adaptor Input : 100 ~ 240 VAC(±10%), 50/60Hz
- Adaptor Output : Single-output-DC 12V, 1.5A
- Dying gasp : Support
- Power consumption : Complies with Energy Star 2.0
EU CoC 4.0 spec compliance
The maximum power consumption needs to be under 90% of Power Adapter's consumption

Environment

- Operating Temperature : 0°C~40°C (32°F~104°F);
- Storage Temperature : -20°C~70°C (-40°F~158°F)
- Operating Humidity : 0 to 95% RH
- Storage Humidity : 0 to 95% RH



Taiwan:

3F-1, No.10, Lane 609, Chongxin Road, Section 5,
Sanchong Dist, New Taipei City 24159, Taiwan
Tel: 886-2-2999-8261
Fax: 886-2-2999-8497

China:

1F, No. 88 Building M1 East QianJin Road,
Kunshan City, PC: 215300, China
Tel: 86-512-57383156,
Fax: 86-512-57383155

Spain:

Edif. América II C/Prócion,7 portal 3 bajo H 28023 Madrid, Spain
Tel: 34-917990403
Fax: 34-913510999

Czech Republic:

TOKOVO Jankovcova 1518/2, 170 00, Prague 7, Czech Republic
Tel: 420-266-782040
Fax: 420-266-782990

USA & Canada:

16 Goodyear, Suite 120, Irvine, CA 92618
Tel: 1-949-7539640
Fax: 1-949-7539020