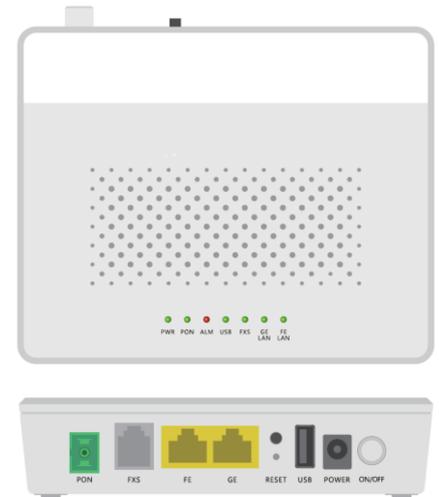


# GPON

GPON | 1x GE + 1x FE LAN | 1x FXS | 1x USB

## GRG-4242u

# GPON FXS ONT



Comtrend's residential GPON ONT GRG-4242u is standards based CPE designed for advanced triple-play deployments. The indoor models of Comtrend's GPON ONT product line provide a lower cost and small package which contains many features including QoS, VoIP, Data Bridge and multicast video support.

GRG-4242u ONT is ideal for triple-play service deployments in FTTH/FTTB applications. Industry standard SIP voice signaling provides reliable voice services. The Gigabit Ethernet and Fast Ethernet ports can be used as a data bridge to offer data connectivity for IP video and data.

Compliant with standard OMCI definition, GRG-4242u is manageable from the remote side and supports the full range FCAPS functions including supervision, monitoring and maintenance.

## FEATURES

- . Gigabit Ethernet Data Bridge
- . FXS SIP VoIP Service
- . UPnP, IPv6 compliant
- . Supports TR-069/TR-098/TR-104/TR-140
- . Configuration backup and restoration
- . Web-based management (HTTPS/HTTP)
- . Supports remote administration, automatic firmware upgrade and configuration
- . Three level login (local admin, local user, remote support)
- . Service access based on incoming interface and/or source IP address
- . NAT/PAT
- . IGMP Proxy/ Fast Leave/ Snooping/ Proxy
- . DHCP Server/Client
- . Embedded SNMP agent
- . IP/MAC address filtering
- . Static route/ RIP/ RIP v2 routing functions
- . DNS Proxy/Relay
- . Parental Control
- . SNTP time synchronization
- . Dynamic DNS

# GRG-4242u

GPON | 1x GE + 1x FE LAN | 1x FXS | 1x USB

## SPECIFICATIONS

### Hardware

- GPON Chipset: BCM68488
- Flash Memory: Flash 1GBit
- SDRAM for CPU: DDR3 1GBit
- Console: Internal console port (4 pin)

### Interfaces

#### LAN:

- 1x 10/100/1000Base-TX Gigabit Ethernet RJ-45 port
- 1x 10/100Base-TX Fast Ethernet RJ-45 port
- Compliant with following standards:
  1. IEEE 802.3/802.3u
  2. Hardware based 10/100/1000, full/half, flow control auto negotiation
  3. Non-blocking wire speed reception and transmission
  4. Full duplex IEEE 802.3x flow control and half duplex back-pressure flow control
  5. Broadcast storm protection
  6. Automatic address learning, address aging and address migration
  7. Integrated address Look-Up Engine, 1 K absolute MAC addresses supported

#### WAN:

- 1x inner GPON port
- Data Rate:
  - Downstream: up to 2.4Gbps
  - Upstream: up to 1.2Gbps
- Down wavelength: 1490 nm
- Up wavelength: 1310 nm
- Maximum transmission distance: 20 Km

#### USB:

- 1 x USB2.0 port

### Networking Protocols

- 802.1q/1p VLAN over RFC2684 bridge encapsulation
- PPPoE
- PPPoE passthrough
- PPPoE filtering of non-PPPoE packets between WAN and LAN
- Auto clean up of remote stalled PPP sessions at BRAS
- IpoE/MER (IP over Ethernet over AAL5)
- Transparent bridging between all LAN and WAN interfaces
- WAN to WAN blocking in bridge mode

### VoIP

- 1x FXS port
- SIP Protocols
- RTP ( RFC 1889)/ RTCP ( RFC 1890)
- UDP ( RFC 768)
- SDP ( RFC 2327)
- Outbound Proxy
- 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.

### GPON Compliance

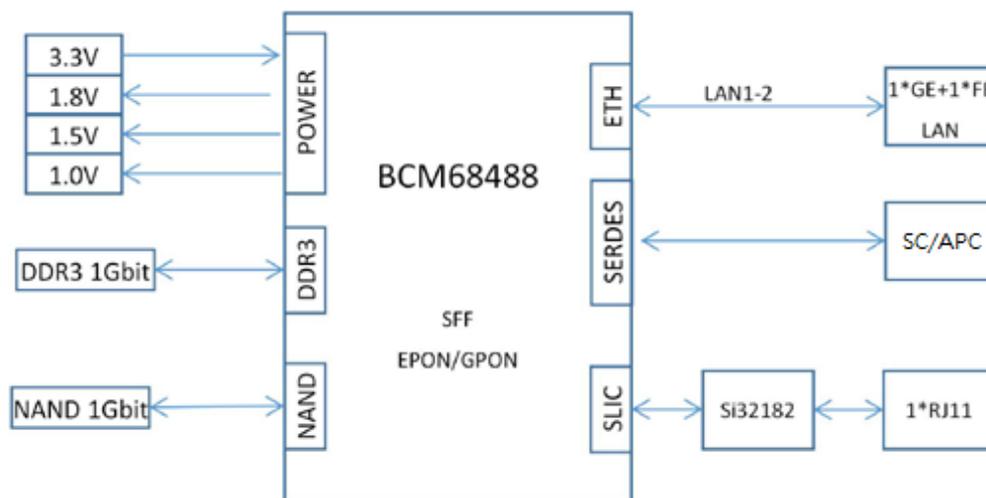
- ITU-T G.984.1, G.984.2, G.984.3, G.984.4
- Fully ITU-T G.984 compliant framing
- Support 8 T-CONTs and 32 GEM Ports
- Multiple T-CONTs per device
- Multiple GEM Ports per device
- Support Single T-CONT mode and Multiple T-CONTs mode
- Flexible mapping between GEM Ports and T-CONT
- Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction)
- DBA reporting in status indications in the PLOu, and by piggyback reports in the DBRu (mode 0)
- 802.1p service mapping profile on U/S
- Mapping of GEM Ports into a T-CONT with priority queues based scheduling
- Support for Multicast GEM Port

### Environment Condition

- Input: 110-220VAC, 50/60Hz (Region dependent)
- Output: 12V DC, 1A (Switch)
- Operation Temperature: 32 °F to 104 °F (0 °C to 40 °C)
- Storage Temperature: -4 °F to 149 °F (-20 °C to 70 °C)
- Humidity: 5% ~ 95% non-condensing

### Dimensions

- Physical Dimensions: 130x106x30mm



## COMTREND

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