

# GPON VoIP Gateway AX3000

PON | 802.11ax@5GHz + 802.11ax@2.4GHz | 4x GE LAN | VoIP | USB

## GRG-4296U



**GRG-4296u** is a highly integrated GPON access device. It offers high-performance Data, Voice and Video services for individual users, SOHO (small office or home office), small businesses, etc.

GRG-4296u complies with the ITU-T G.984 standard, provides 2.488 Gbps downlink and 1.244 Gbps uplink on the network side, and provides four high-speed GE ports, one FXS port for internet calling, dual-band Wi-Fi 6 (2T2R 802.11ax@5GHz and 2T2R 802.11ax@2.4GHz). The two wireless bands are separated into two dedicated Wi-Fi networks, supporting more end-user devices while reducing signal interference. Furthermore, there is a USB 3.0 host interface on the user side.

### KEY FEATURES

- **OFDMA and MU-MIMO:** Supports both up-link and down-link, allowing efficient data transmission for more devices at the same time.
- **Wi-Fi 6:** 2.4GHz wireless 802.11ax compatible 11b/g/n, up to 600Mbps PHY rate  
5GHz wireless 802.11ax compatible 11a/n/ac, up to 2400Mbps PHY rate
- **160MHz & 1024 QAM:** Wider band and high definition offer high throughput capability.
- 1 x **USB host** provides high speed access to USB devices such as printer server, 3G dongle, HDD, and has future DLNA connectivity
- **Remote Management:** TR-069 standard data model for ISP remote control

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## SPECIFICATIONS

HARDWARE	
Flash	256MB Nand Flash
SDRAM	512MB DDR
<b>Interfaces</b>	<ul style="list-style-type: none"><li>▪ WAN: 1x GPON port (SC/APC); Data Rate: Downstream: up to 2.488Gbps; Upstream: up to 1.244Gbps; Receiving wavelength: 1,490 nm; Transmitting wavelength: 1,310 nm; Optical Range: Class B</li><li>▪ LAN: 4x 10/100/1000 Base-T MDI/MDIX RJ-45 ports Compliant with the 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</li><li>▪ External antennas; 2.4G IEEE 802.11ax, backward compatible with 802.11b/g/n; Up to 600Mbps PHY rate 5G IEEE 802.11ax, backward Compatible with 802.11a/n/ac; Up to 2400Mbps PHY rate</li><li>▪ FXS: 1x FXS</li><li>▪ USB: 1x USB 2.0 Host (3.0 optional)</li></ul>
PACKAGE CONTENTS	
GPON ONT (GRG-4296u)	
Power adapter 12VDC/1.5A	
ENVIRONMENT	
<b>Operating Temperature</b>	0 °C to 40 °C
<b>Operation Humidity</b>	10% ~ 95% (non-condensing)



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Maximum performance, actual data rates, and coverage will vary depending on network conditions and environmental factors. Product specifications and design are subject to change without notice.