

Ubee DOCSIS 3.0

Advanced Wireless Voice Gateway

Model: UBC1307

UBC1307 Device Highlights

- High Speed The UBC1307 delivers increased bandwidth for subscribers' multimedia and high-bandwidth applications (up to 343 Mbps downstream, 122 Mbps upstream).*
- Enhanced Wireless The UBC1307 provides 8 SSIDs that offer considerable flexibility for the customer's network. MSOs can reserve SSIDs for hotspots, guest access, and other applications.
- Security The UBC1307 delivers the latest security authentication and encryption standards to prevent unauthorized access to the wireless network. These include WPA/WPA2, WPS, and SPI Firewall.
- Network Interface 2 10/100/1000 Ethernet interfaces provide high speed LAN capability. IPv4 and IPv6 support enables increased address capacity and improved security.
- Full Band Capture For channel lineup flexibility: No "block" tuner restrictions such as all DOCSIS bonding in certain frequency window. Keeps voice service on existing channels.
- **Diagnostic Capability -** Integrated high performance spectrum analyzer helps reduce troubleshooting costs.
- Voice The UBC1307 offers one analog telephone connection. Without battery capability, it is an economical solution for MSOs that do not need battery backup.

* Actual speeds vary based on factors such as network configuration and service tier.



UBC1307 Advanced Wireless Voice Gateway

Overview

Ubee introduces the UBC1307-CA00 Advanced Wireless Voice Gateway. The UBC1307 blends high-speed LAN capabilities with the convenience of wireless networking, and analog telephony in one device. It is well-suited to deliver multiple networking capabilities for the contemporary demands of residential and Small Office/Home Office (SOHO) subscribers. The UBC1307 reduces operational expenditures (OpEx) by eliminating the need for multiple devices in the home/office or the MSO warehouse. Additional features include:

- Speeds and Compatibility By supporting Gigabit Ethernet and 802.11n, the UBC1307 offers LAN and enhanced wireless speeds to take advantage of higher speed tiers offered by DOCSIS 3.0. It is fully backwards compatible with 10/100 Ethernet, 802.11 b/g wireless, and DOCSIS 1.x/2.0 standards.
- QOS Quality of Service (QOS) features enable traffic prioritization for delay-sensitive multimedia services and applications.
- Power Savings The UBC1307 offers UAPSD power savings, interacting with connected wireless clients, prompting them to doze and save power whenever possible. The UBC1307 buffers downlink data until the client awakens.
- Miscellaneous Energy Star compliant, file sharing, DLNA and network setup.

Let's Make It Easy

Combined with world-class engineering and manufacturing, Ubee's core principle it to make it easy to work with our products. Through the entire life cycle of our devices - from implementing requirements, staging, and deployment, to operational support and the user experience - Ubee makes it easy. Contact a Ubee Product Specialist for more information on the UBC1307 Advanced Wireless Voice Gateway.

Ordering Information	
Ubee Part #	Country
UBC1307-CA00	México, Colombia, Ecúador, Peru, Central América



UBC1307 Product Specifications

Interfaces & Standards

- Cable: F-Connector, female
- LAN: 2 10/100/1000 Mbps RJ-45 Ports
- Telephony: 1 RJ-11 port
- PacketCable 1.5/2.0 compatible (requires customization)
- DOCSIS 3.0 certified
- DOCSIS 1.0/1.1/2.0 certified
- CE/FCC Class B, Energy Star Certified, WiFi Alliance Certified

Downstream*

- Frequency Range: 108MHz ~ 1002MHz
- Modulation: 64 / 256 QAM
- Channel B/W: 6 MHz
- Maximum Data Rate per Channel (up to 8 channels): DOCSIS = 30 Mbps (64 QAM), 42 Mbps (256 QAM)
- ☐ Total Max Bandwidth (8 Channels): DOCSIS = 343 Mbps
- Symbol Rate: 5361 Ksps
- RF Input Power: -15 to +15dBmV (64 QAM), -15 to +15dBmV (256 QAM)
- Input Impedance: 75 Ω

Upstream*

- ☐ Frequency Range: 5MHz ~ 42MHz
- Modulation A-TDMA: QPSK, 8, 16, 32, 64QAM, S-CMDA: QPSK, 8, 16, 32, 128QAM
- Max B/W of 4 Channels = 122.88 Mbps, B/W Per Channel (up to 4 channels) = [QPSK 0.32 ~ 10.24 Mbps, 8 QAM 0.48 ~ 15.36 Mbps, 16 QAM 0.64 ~ 20.48 Mbps, 32 QAM 0.80 ~ 25.6 Mbps, 64 QAM 0.96 ~ 30.72 Mbps, 128 QAM/ TCM 30.72 Mbps]
- □ Symbol Rate: 160, 320, 640,1280, 2560, 5120 Ksps
- RF Output Power: TDMA/ATDMA: +8dBmV to +54dBmV (32/64 QAM). ATDMA Only: +8dBmV to +55dBmV (8/16 QAM), +8dBmV to +58dBmV (QPSK). S-CDMA: +8dBmV to +53dBmV (all modulations)
 - * Theoretical number with optimum conditions. Actual speeds vary based on factors such as network configuration and service tier.

Enhanced Wireless, Network, & Security

- □ Supports 8 SSIDs, 802.11b/g/n compliant with link speeds up to 300 Mbps*, 2 Tx and 2 Rx internal antennas with single band 2.4GHz radio. 2 spatial streams and up to 200mW radiated power.
- DHCP client/server & static IP network assignment, RIPv1/ v2, Ethernet 10/100/1000 BaseT, full-duplex auto-negotiate functionality, IPv4 and IPv6 support
- NAT firewall, MAC/IP/port filtering, parental control, stateful packet inspection (SPI), DoS attack protection, WPS/ WPA/ WPA2/ WPA-PSK & 64/128-bit WEP encryption
- VPN pass-through and VPN end-point support (IPSec/ L2TP/PPTP), TACACS or RADIUS authentication

Voice

- □ PacketCable 1.5 (NCS) and 2.0 (IMS/SIP)
- Ring Voltage: 270 VAC, pk-pk (tip ring), Line Voltage Onhook: -48 Volts, Loop Current: 20mA / 41mA, Ring Capability: 2K ft., 5REN, Hook State: Signaling Loop Start
- □ DTMF Tone Detection, T.38 FAX Relay (G.711), Echo Cancellation (G.168) / Silence Suppression, Voice Active Detection and Comfort Noise Generation, and dynamic jitter buffer
- G.722 codec, Wide Band SLIC

Device Management

- Supports IEEE 802.11e WiFi Multimedia (WMM) and UAPSD (power savings)
- DOCSIS, Web-based, and XML configuration
- Telnet remote management
- Firmware upgrades via TFTP
- Configuration backup and restore
- SNMP support
- ☐ TR-069 capable

Physical and Environmental

- Dimensions: 38 (W) x 143 (D) x 195 (H) mm
- Weight: 356 g (unit only)
- Power Consumption: 18W (full load)
- Operating Temperature: 0°C ~ 40°C
- Humidity: 5 ~ 90% (non-condensing)
- Operating altitude from sea level: -60 to +4,500 meters
- Energy Star Compliant, Level VI Power Supply: 12V / 1.5A
 NOM certified, 100-240 VAC, 50-60 Hz, 0.6A Max



