

Ubee DOCSIS 3.0 24 x 8

Advanced Wireless Voice Gateway

Model: UBC1310-BA00

UBC1310 Device Highlights

- High Speed The UBC1310 delivers increased bandwidth for subscribers' multimedia and high-bandwidth applications (up to 1029 Mbps downstream, 246 Mbps upstream).*
- Enhanced Wireless The UBC1310 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 UBC1310 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 4 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 UBC1310 offers two analog telephone connections.



UBC1310 24x8 Advanced Wireless Voice Gateway

Overview

Ubee introduces the **UBC1310 High-Speed**, **Advanced Wireless Voice Gateway**. The UBC1310 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 to meet the contemporary demands of residential and Small Office/Home Office (SOHO) subscribers. The UBC1310 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 802.11ac, the UBC1310 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/n 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 UAPSD power savings. UAPSD interacts with connected wireless clients, prompting them to doze and save power whenever possible. The UBC1310, for example, buffers downlink data until the client awakens.
- Miscellaneous Energy Star compliant. 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 UBC1310 High-Speed, Advanced Wireless Voice Gateway.

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

UBC1310 Product Specifications

Interfaces & Standards

- Cable: F-Connector, female
- LAN: 4 10/100/1000 Mbps RJ-45 Ports
- □ 2 RJ-11 ports (telephony), PacketCable 1.5/2.0 Compatible
- 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 24 channels):
 DOCSIS = 30 Mbps (64 QAM), 42 Mbps (256 QAM)
- ☐ Total Max Bandwidth (24 Channels): DOCSIS = 1029 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 ~ 85MHz
- Modulation A-TDMA: QPSK, 8, 16, 32, 64QAM, S-CMDA: QPSK, 8, 16, 32, 128QAM
- Max B/W of 8 Channels = 246 Mbps, B/W Per Channel (up to 8 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)
 - * Actual speeds vary based on factors such as network configuration and service tier.

Enhanced Wireless, Network, & Security

- □ Supports 8 SSIDs, 802.11a/b/g/n/ac compliant with link speeds up to 1750 Mbps (450+1300), 3 Tx and 3 Rx antennas with dual-band concurrent radios
- 802.11ac Beam Forming focuses the signal toward each client, contracting the transmission so more data reaches the targeted device.
- 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
- ☐ G.722 codec, WB SLIC

Device Management

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

Physical and Environmental

- Dimensions: 284 (W) x 283 (D) x 53 (H) mm
- Weight: 800 g (unit only)
- Power: 12V / 2.5A, External PSU
- □ Operating Temperature: 0°C ~ 40°C
- ☐ Humidity: 5 ~ 90% (non-condensing)



