

## Ubee DOCSIS 3.0

# **Advanced Wireless Voice Gateway**

Model: DVW32CB

## **DVW32CB Device Highlights**

- High Speed The DVW32CB delivers increased bandwidth for subscribers' multimedia and high-bandwidth applications (up to 686 Mbps downstream, 122 Mbps upstream).\*
- **Enhanced Wireless -** The DVW32CB 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 DVW32CB 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 DVW32CB offers two analog telephone connections. Enclosed battery delivers maximum uptime during unplanned events, such as power failures.



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

DVW32CB Advanced Wireless Voice Gateway

## **Overview**

Ubee introduces the **DVW32CB Advanced Wireless Voice Gateway**. The DVW32CB 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 the contemporary demands of residential and Small Office/Home Office (SOHO) subscribers. The DVW32CB 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 DVW32CB 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 UAPSD power savings. UAPSD interacts with connected wireless clients, prompting them to doze and save power whenever possible. The DVW32CB, for example, buffers downlink data until the client awakens.
- MoCA Support for the latest home networking standard designed from the ground up to support streaming video and data over coax cables already in place. Only MoCA has the ability to serve today's requirements more reliably than any other home network technology.
- 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 DVW32CB Advanced Wireless Voice Gateway.

# **DVW32CB 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
- MoCA 2.0 enabled
- CE/FCC Class B, Energy Star Certified, WiFi Alliance Certified

#### **Downstream\***

- ☐ Frequency Range: 88MHz ~ 1002MHz
- Modulation: 64 / 256 QAM
- Channel B/W: 6 MHz
- Maximum Data Rate per Channel (up to 16 channels):
  DOCSIS = 30 Mbps (64 QAM), 42 Mbps (256 QAM)
- Total Max Bandwidth (16 Channels): DOCSIS = 686 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 (108) 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)
  - \* Actual speeds vary based on factors such as network configuration and service tier.
  - \*\* Actual performance is affected by battery age and operating environment.

#### **Enhanced Wireless, Network, & Security**

- □ Supports 8 SSIDs per radio, 802.11b/g/n/ac compliant with link speeds up to 1750 Mbps (450 @ 2.4GHz + 1300Mbps @ 5GHz), beam forming technology and high powered amplifiers to extend WiFi range, 3 Tx and 3 Rx antennas with dual-band concurrent, high power radios
- 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 and HTTP
- Configuration backup and restore
- SNMP support
- TR-069 capable

### **Physical and Environmental**

- Dimensions: 284 (W) x 283 (D) x 53 (H) mm
- Weight: 770 g (unit only), 1.2 Kg (unit plus battery)
- Power: 12V / 2.92A, internal PSU
- □ Operating Temperature: 0°C ~ 40°C
- Humidity: 5 ~ 90% (non-condensing)
- Battery supports continuous voice service during power outages; up to 8 hours standby, 5 hours talk time with 1 line active.\*\*



