Ubee DOCSIS 3.0
Advanced Wireless Gateway
Model: **DDW36C**

DDW36C Device Highlights

High Speed - The DDW36C delivers increased bandwidth for subscribers' multimedia and high-bandwidth applications (up to 686 Mbps downstream, 122 Mbps upstream).*

Enhanced Wireless - The DDW36C provides 8 SSIDs per radio that offer considerable flexibility for the customer's network. MSOs can reserve SSIDs for hotspots, guest access, and other applications.

Security - The DDW36C 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.

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

DDW36C Advanced Wireless Gateway

Overview

Ubee introduces the DDW36C Advanced Wireless Gateway. The DDW36C blends high-speed LAN capabilities with the convenience of wireless networking in one device. The DDW36C is well-suited to deliver multiple networking capabilities to the contemporary demands of residential and Small Office/Home Office (SOHO) subscribers. The DDW36C 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 802.11b/g/n/ac, the DDW36C offers LAN and enhanced wireless speeds to take advantage of higher speed tiers offered by DOCSIS 3.0. The DDW36C 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 DDW36C, 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 **DDW36C Advanced Wireless Gateway.**

let's make it easy

DDW36C Product Specifications

Interfaces & Standards

- ❏ Cable: F-Connector, female
- ❏ LAN: 4 10/100/1000 Mbps RJ-45 Ports
- ❏ DOCSIS 3.0 certified
- ❏ DOCSIS 1.0/1.1/2.0 certified
- ❏ MoCA 2.0 enabled
- ❏ UL/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)
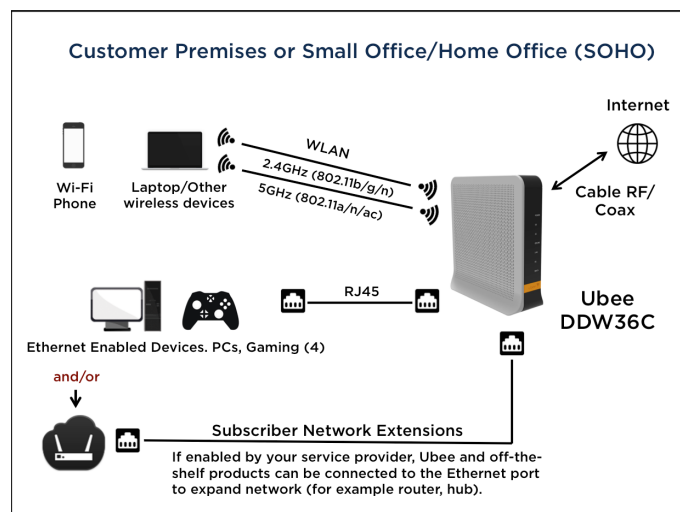
Enhanced Wireless, Network, & Security

- ❏ Supports 8 SSIDs per radio, 802.11b/g/n/ac compliant with link speeds up to 1750 Wi-Fi (450Mbps @ 2.4GHz + 1300Mbps @ 5GHz), beam forming technology and high powered amplifiers to extend Wi-Fi 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

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: 45 (W) x 225 (D) x 240 (H) mm
- ❏ Weight: 860 g, or 1 lb, 14 oz (Contains PSU)
- ❏ Power: AC inout 90-132VAC, 50/60Hz, 0.6A max.
- ❏ Operating Temperature: 0℃ ~ 40℃
- ❏ Humidity: 5 ~ 90% (non-condensing)

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

Customer Premises or Small Office/Home Office (SOHO)

Internet

Wi-Fi Phone

Laptop/Other wireless devices

WLAN
2.4GHz (802.11b/g/n)
5GHz (802.11a/n/ac)

Cable RF/ Coax

Ubee DDW36C

RJ45

Ethernet Enabled Devices. PCs, Gaming (4)

and/or

Subscriber Network Extensions

If enabled by your service provider, Ubee and off-the-shelf products can be connected to the Ethernet port to expand network (for example router, hub).

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