



# DOCSIS 3.1 Cable Modem

Model: **UBC1302-BA00**

The **UBC1302-BA00 DOCSIS 3.1 Cable Modem** marks the introduction of Ubee's next generation DOCSIS 3.1 products. The UBC1302 integrates a DOCSIS 3.1 cable modem and 4-port gigabit Ethernet switch.

## Key Features & Benefits:

- High Speed** - The UBC1302 delivers increased bandwidth for subscriber's multimedia and high-bandwidth applications.
  - DOCSIS 3.1:**
    - Downstream:** 108 to 1002 MHz, up to 2x OFDM, and up to 32 SC-QAM channels provide capacity up to 5Gbps
    - Upstream:** 5 to 42/85 MHz (42/85 switchable), up to 2x OFDMA, and up to 8 SC-QAM channels provide capacity up to 2Gbps
  - DOCSIS 3.0:** 32 downstream and 8 upstream channels provide speeds of up to 1372Mbps downstream and 246Mbps upstream.
- Network Interface** - Four 10/100/1000 Ethernet ports provide high-speed LAN capability. Link aggregation group (LAG) support across the four 1GigE ports provide total PHY speeds of up to 4 Gbps. IPv4 and IPv6 support enables increased access capability 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 will vary based on factors such as network configuration and service tier.

## Let's Make it Easy

Combined with world-class engineering and manufacturing, Ubee's core principle is 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 **UBC1302-BA00 DOCSIS 3.1 Cable Modem**.



**Ubee UBC1302 D3.1 Cable Modem**



# UBC1302-BA00 Product Specifications

## Interfaces & Standards

- ❑ Cable: F-Connector, female
- ❑ LAN: 4 10/100/1000 Mbps RJ-45 port
- ❑ DOCSIS 3.1 certified
- ❑ DOCSIS 1.0/1.1/2.0/3.0 certified

## Regulatory

- ❑ UL/FCC Class B, Energy Star Certified

## Security

- ❑ DOS (denial of service) attack protection

## Device Management

- ❑ Web-based graphical user interface
- ❑ SNMP v1, v2c, v3
- ❑ Serial console (optional)
- ❑ Syslog
- ❑ Telnet console
- ❑ Spectrum analyzer
- ❑ TR-069 capable

## Physical & Environmental

- ❑ Dimensions: 50mm, 1.9 inches (W), 143mm, 5.6 inches (L), 195mm, 7.7 inches (H)
- ❑ Weight: 400g (14.1 oz)
- ❑ Power: 12V 1.5A, external PSU
- ❑ Operating Temperature: 0°C ~ 45°C (32°F ~ 113°F)
- ❑ Storage Temperature: -20°C ~ 70°C (-4°F ~ 158°F)
- ❑ Humidity: 5 ~ 95% (non-condensing)

## Downstream\*

- ❑ Frequency Range: 108MHz/1002MHz
- ❑ Capture Bandwidth: 1GHz
- ❑ Modulation: 64 or 256 QAM and OFDM: up to 4096 QAM
- ❑ Maximum DOCSIS 3.1 Data Rate: 2 x 192MHz OFDM channels provide capacity up to 5Gbps
- ❑ Maximum DOCSIS 3.0 Data Rate: 32 downstream channels provide speeds up to 1372Mbps
- ❑ Symbol Rate: 5361 Ksps
- ❑ RF (cable) Input Power: -15 to +15dBmV (64 QAM), -15 to +15dBmV (256 QAM)
- ❑ Input Impedance: 75  $\Omega$

## Upstream\*

- ❑ Frequency Range: 5MHz ~ 42MHz/85MHz switchable
- ❑ Modulation: QPSK or 8/16/32/64/128 QAM and OFDMA: up to 4096 QAM
- ❑ Maximum DOCSIS 3.1 Data Rate: 2 x 96MHz OFDMA channels provide capacity up to 2Gbps
- ❑ Maximum DOCSIS 3.0 Data Rate: 8 upstream channels provide speeds up to 246Mbps
- ❑ Symbol Rate: 160, 320, 640, 1280, 2560, 5120 Ksps
- ❑ RF (cable) 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 including network configuration and speed.

## Customer Premises or Small Office/Home Office (SOHO)



Network Extension Device  
(i.e. WiFi Home Router)



(4) RJ45



## Ubee UBC1302-BA00



Internet



Cable RF/  
Coax

**NOTE:** Since the UBC1302-BA00 is a modem, not a router, each attached device requires the subscriber to purchase an additional Dynamic Public IP address from the Cable Company. Most subscribers only choose to purchase 1 Dynamic Public IP. In that case, be sure to connect ONLY the subscriber's home router to 1 of the 4 Ethernet ports.

