DOCSIS Ultra 3.1 Cable Modem Router

with Wi-Fi 7, Voice

CODA6011UV

Give your customers the power of 10G! Hitron's CODA6011UV boasts the latest DOCSIS Ultra 3.1 technology including mid/high dual-split for an extremely flexible and optimized upstream and downstream experience like no other. This flexibility allows ISPs to offer higher speeds to their customers - and next generation Wi-Fi 7 Dual-Band. The result is the ultimate digital home experience: stunning 4K and 8K streaming, stutter-free VR applications, a flawless smart home, video conferencing and more. And that's not all. The CODA6011UV offers 4 Ethernet ports with 2 being 10GigE and 2 2.5GigE, along with two HD voice ports. This powerful hub can meet virtually any home and small business networking need.

Faster Wi-Fi with WiFi7 Dual-Band

The CODA6011UV is a next-generation WiFi 7 dual-band router delivering ultra-fast, low-latency connectivity. Supporting wider 320 MHz channels and advanced Multi-Lin Operation (MLO), it maximizes throughput and reliability across both 2.4 GHz and 5 GHz bands. This ensures outstanding performance for IoT devices, mobile clients, and demanding applications, even in high-density environments.

Switchable Frequency

You can seamlessly support today and tomorrow bandwidth demands with the software switchable upstream and downstream path. Want to upgrade customers to higher-tier speeds? No problem. You can remotely change band split options between (5-85MHz / 108-1794MHz) or (5-204MHz / 258-1794MHz) at any time. There's no need to swap out hardware or send out a technician.

Key Features

- DOCSIS Ultra 3.1 5x2 OFDM/OFDMA
- DOCSIS 3.0 32x8 Channel Bonding
- Switchable Upstream: 5-85MHz / 5-204MHz
- Extended Downstream 1794MHz
- 4x4 2.4GHz 802.11be, 4x4 5GHz 802.11be Dual-band
- Concurrent MU-MIMO Internal Antennas
- 16 SSIDs (8 SSIDs per Radio)
- Individual Configuration for each SSID
- Two 10 GigE and two 2.5 GigE Ports
- Two HD Voice Ports, SIP and MGCP Support
- TR-069, TR-369 and Remote Management
- Hitron Ecosystem Support (OptiMy, HitronCloud, MyHitron+)
- Low Latency DOCSIS

Interfaces
- 1 x RF F-Type 75Ω Female Connector
- 2 x RJ-45 100M/1G/2.5G/5G/10G BASE-T
- 2 x RJ-45 100M/1G/2.5G BASE-T Ethernet Port
- 2 x RJ-11 HD Voice Ports

Reception-Demodulation
- DOCSIS 4.0/3.1/3.0/2.0
- DOCSIS 3.1/3.0/2.0
- DOCSIS 3.1 Transmissions up to 1794 MHz
- Support 5 configurable OFDM channels each up to 192MHz
- Support 32 SC-QAM bonded channels (Frequency range of 258 MHz to 1002 MHz)
- Support 32 SC-QAM bonded channels (Frequency range of 108 MHz to 1002 MHz)
- Service Frame Size of up to 2000 bytes
- Demodulation: Multi-carrier OFDM 16 to 4096QAM
- DOCSIS 3.0 Demodulation: 64QAM, 256QAM
- DOCSIS 3.0 Data Rate: Up to 1.2Gbps with 32 Bonded Downstream Channels
- Switchable 108-1008 MHz / 258-1794 MHz
- Signal Level: 15dBmV

Transmitter-Modulation
- DOCSIS 3.1/3.0/2.0
- Support 2 configurable OFDMA channels, each up to 96 MHz
- Support 8 SC-QAM bonded channels (Frequency range of 5 MHz to 85 MHz)
- Support 8 SC-QAM bonded channels (Frequency range of 5 MHz to 204 MHz)
- DOCSIS 3.1 Modulation: Multi-carrier OFDMA BPSK to 4096QAM
- DOCSIS 3.1 Data Rate: Up to 1 Gbps with OFDMA 96MHz Upstream Channels
- DOCSIS 3.0 Modulation: QPSK, 8QAM, 16QAM, 32QAM, 64QAM, and 128QAM (SCDMA only)
- DOCSIS 3.0 Data Rate: Up to 320Mbps with 8 bonded Upstream Channels

Wi-Fi
Wi-Fi Characteristics
- 802.11a/b/g/n/ac/ax/be
- 4T4R 5GHz 11be (5.7Gbps)
- 4T4R 2.4GHz 11be (1.3Gbps)
- 20/40/80/160MHz Channel Bandwidth
- High Power Design for Multi-radio Co-location
- Supports Standard 5GHz UNII Bands

Wi-Fi Security
- WPA2-PSK (TKIP/AES)
- WPA3-SAE
- WiFi Enhanced Open

- Wi-Fi Features
- Up to 8 SSIDs per Radio
- 4096 QAM support on band (5GHz)
- 4096 QAM support on band (2.4GHz)
- 160MHz channel support on 5GHz band
- Multi-Link Operation (Single radio / Dual radio)
- Transmit Power Control by Service Provider
- WPS (Wi-Fi Protected Setup) PBC, PIN
- Airtime Fairness (ATF)
- Band Steering (BS)
- Dynamic Frequency Selection (DFS)
- Wi-Fi Output Power Range: Max permitted by FCC/IC
- Roaming: 802.11r/k/v

Voice
General Voice Features
- SIP v2 Call, SIP v2 Call Control
- MGCP
- DNS SRV
- Hook Flash Event Signaling
- RTP Audio Transport
- RFC2833 RTP Payload
- SIP INFO
- InBand DTMF Mode
- HD Voice Ports with 16kHz sampling rates

Voice Audio Codecs
- G.711 (a-law and mu-law)
- G.722 (HD codec)
- G.723.1
- G.726
- G.728
- G.729
- AMR (narrowband)
- Adaptive Jitter Buffer
- G.167 Acoustic Echo Cancellation
- FAX Relay Protocols Compliance
- T.38 Pass-through and over IP Fax/Modem Detection Control
- T.28 (IP) Compliant Group 3 and SG3 Fallback to Transport T.30
- V.34 Fax and Modem Bypass
- Automatic Fallback to G.711 support

CLASS Calling Features
- Call Waiting
- Call Hold
- Call Resume
- Call Forward Unconditional, Call Forward on Busy
- Caller ID
- 3-Way Conference
- Call Consultant
- Call Transfer and Network-initiated Class Services - MWI messaging, VMWI via FSK

Routing Support
- Protocol Support: IGMP v3 for IPTV service capability
- MAC Address Filtering (IPv4/IPv6)
- IP Source/Destination Address Filtering (IPv4/IPv6)
- IP over Ethernet (IPoE)
- Point-to-Point Protocol over Ethernet (PPPoE)
- DHCP and TFTP clients (IPv4/IPv6)
- DHCP Server supports RFC 1541 (IPv4)
- DHCPv6 obtains Prefix from DHCPv6 Server through Prefix Delegation
- DNS Proxy
- Port Forwarding and DMZ
- UPnP
- DSLite Support for IPv4 In-home Support with IPv6 Backbone
- 6RD Support for Quick IPv6 Deployment over IPv4 Backbone
- RIPv2 for Static IP Support

Network Security
- Firewall with Stateful Inspection (IPv4/IPv6)
- Hacker Intrusion Prevention and Detection
- Application Content Filtering (IPv4/IPv6)
- Complete NAT Software Implemented as per RFC 1631 with Port and Address Mapping (IPv4)
- Port Blocking
- Keyword Filtering
- Device Filtering

Management
- Onboarding via MyHitron+
- App Configuration, Control and Management
- Cloud Managed Backend Support and Optimization
- Web-based GUI Configuration and Management
- TR-069, TR-104, TR-143, TR-181, TR-369

Mechanical
- LED: One Multi-colored Status LED
- Factory Default Reset Button
- Power Button
- Pair Button

Electrical
- Input Power: 12VDC
- Power Adapter: 100-240VAC, 50/60Hz
- Surge Protection
  - RF Input sustains at least 4KV
  - Ethernet RJ-45 sustains at least 4KV

Environmental
- Operating Temperature: 0°C (32°F) ~ 40°C (104°F)
- Operating Humidity: 10% ~ 90% (Non-condensing)
- Storage Temperature: -40°C (-40°F) ~ 60°C (140°F)

Regulatory Compliance
- RoHS Compliant
- FCC Part 15:2019, Subpart B, Class B
- FCC Part 15, Subpart C (Section 15.247)
- FCC Part 15, Subpart E (Section 15.407)
- FCC Part 2 (Section 2.1091) IEEE C95.3 -2002
- ANSI C63.4:2014
- ANSI C63.10:2013
- UL 62368-1, 2nd Ed, 2014-12-01
- UL 62368 with laser safety standard IEC-60825 Class 1
- Compliant with FDA 21, CFR 1040.10 and 1040.11
- CableLabs DOCSIS 3.1 certified
- CableLabs EuroDOCSIS 3.1 certified
- cUL
- ICES-003
- CE Marking
- WiFi Alliance
- ISED RSS-247
- ISED RSS-102
- ISED RSS-GEN

Specifications subject to change without further notice. Product photo may differ.
DOCSIS Ultra 3.1 is a CableLabs standard for high speed Internet access that defines support for up to 10 Gbps downstream and 1.7 Gbps upstream. Actual cable operator network speeds will vary and will be less than the calculated maximum possible speeds. Actual upload and download speeds are affected by several factors including, but not limited to: the capacity of your cable operator's network, the services offered by your cable operator, cable and Internet network traffic, your computer equipment etc. Final speeds will also be limited by each device and the quality of its connection to the modem or router.

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