hitron

DOCSIS Ultra 3.1 Cable Modem Router

with Wi-Fi 7, Voice

CODA6021

The new DOCSIS 4.0 CODA6021 Gateway sets a new benchmark for home connectivity by combining cutting-edge wired and wireless performance into a single, future-proof platform. With DOCSIS 4.0 Tri-Split technology, next-generation Tri-Band Wi-Fi 7, and multi-gigabit Ethernet interfaces, this gateway is designed to deliver uncompromising speed, reliability, and flexibility for the most demanding households and networks.

Cutting Edge WiFi

Built on MaxLinear's latest tri-band Wi-Fi 7 platform, the gateway delivers 4x4 streams on 2.4 GHz, 5 GHz, and 6 GHz, unlocking the capacity to support dozens of devices at once without compromise. Wi-Fi 7 introduces 320 MHz channels, 4K QAM, and Multi-Link Operation (MLO), which work together to maximize throughput, reduce latency, and make wireless connections more stable—even in congested environments. For homes filled with streaming, gaming, smart devices, and hybrid work, this means a wireless experience that feels as fast and consistent as a wired connection.

DOCSIS for the Future

At its core, DOCSIS 4.0 Tri-Split redefines what cable broadband can deliver with symmetrical multi-gigabit speeds and improved spectrum efficiency. Combined with dual 10 GigE and dual 2.5 GigE LAN ports, the gateway ensures that this massive bandwidth is distributed seamlessly across next-generation home networks. Service providers benefit from a platform that extends the life of their HFC networks, while users enjoy speed and capacity that will grow with them well into the future.

Key Features

- DOCSIS 4.0 5×7 OFDM/OFDMA
- DOCSIS 3.0 32x8 Channel Bonding
- Switchable Upstream: 5-85MHz / 5-204MHz / 5-85+108-396MHz
- Downstream up to 1794MHz
- 4x4 2.4GHz 802.11be, 4x4 5GHz 802.11be, 4x4 6GHz 802.11be Tri-band Concurrent MU-MIMO Internal Antennas
- MU-MIMO Internal Antennas
- 24 SSIDs (8 SSIDs per Radio)
- Individual Configuration for each SSID
- Two 10 GigE and two 2.5 GigE Ports
- 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

Reception-Demodulation
- DOCSIS 4.0/3.1/3.0/2.0
- DOCSIS 3.1/3.0/2.0
- DOCSIS 4.0 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
- Tri-Split Frequency: Switchable 108-1794MHz / 258-1794MHz / 492-1794MHz
- Signal Level: 15dBmV

Transmitter-Modulation
- DOCSIS 4.0/3.1/3.0/2.0
- Support 7 configurable OFDMA channels, each up to 96 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
- Tri-Split Frequency: Switchable 5-85MHz / 5-204MHz / 5-85+108-396MHz

Wi-Fi
Wi-Fi Characteristics
- 802.11a/b/g/n/ac/ax/be
- 4T4R 6GHz 11be (11.5Gbps)
- 4T4R 5GHz 11be (5.7Gbps)
- 4T4R 2.4GHz 11be (1.3Gbps)
- 20/40/80/160/320MHz Channel Bandwidth
- High Power Design for Multi-radio Co-location
- Supports Standard 6GHz UNII Bands
- Supports Standard 5GHz UNII Bands

Wi-Fi Features
- Up to 4 SSIDs per Radio
- Prioritized QoS: WMM/WMM-PS
- 4096 QAM support on band (6GHz)
- 4096 QAM support on band (5GHz)
- 4096 QAM support on band (2.4GHz)
- 320MHz channel support on 6GHz band
- 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

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

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
- Power Input: 12VDC
- Power Adapter: 100-240VAC, 50/60Hz
- Surge Protection
- 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
- Compliant with CableLabs DPoE
- CableLabs DOCSIS 3.1 certified
- CableLabs DOCSIS 4.0 certified
- cUL
- ICES-003
- CAN/CSA C22.2 No. 62368-1-14, 2nd Ed, Issued: 2014-12-01
- WiFi Alliance
- ISED RSS-247

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.

P/N: CODA6021-D-001