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# DOCSIS 3.1 Cable Modem Router

## with Wi-Fi 6 and MoCA

CODA-5712

The powerful CODA-5712 cable gateway forms the heart of today and tomorrow's wireless home. The gateway supports DOCSIS 3.1 – up to 10 Gbps* downstream - and next generation Wi-Fi 6 speeds up to 9.6 Gbps. 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 CODA-5712 offers bonded MOCA 2.0 and 2.5GigE wired ports.

## DOCSIS 3.1 Certified

DOCSIS 3.1 takes Internet speeds to a new level, increasing the capacity of HFC networks by more than 50 percent and reducing latency. This means your customers can connect more devices, enjoy richer digital experiences and get fast, reliable Internet service for all of today and tomorrow's needs.

## Software-switchable Frequency

Upgrade to the high-split (5-204MHz) return path to meet the increased upstream bandwidth demands of video conferencing, IoT and interactive services. Further, since you can change this feature remotely, you have eliminated the need to swap out hardware or send out a technician.

## Key Features

- DOCSIS 3.1 2x2 OFDM/OFDMA
- DOCSIS 3.0 32x8 Channel Bonding
- Switchable Upstream: 5-85MHz / 5-204MHz
- 4x4 2.4GHz 802.11ax and 4x4 5GHz 802.11ax Dual-band Concurrent MU-MIMO Internal Antennas
- 16 SSIDs (8 SSIDs per Radio)
- Individual Configuration for each SSID
- MoCA 2.0 Channel Bonding
- One 2.5 GigE and two 1 GigE Ports
- TR-069 and HNAP for Easy Setup and Remote Management
- Supports IPv4 and IPv6
- Hitron Ecosystem Support (OptiMy, HitronCloud, MyHitron)

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# CODA-5712 - Specifications




## Interfaces

- 1x RF F-Type 75Ω Female Connector
- 2x RJ-45 10/100/1000BASE-T Ethernet Ports
- 1x RJ-45 1/2.5GBASE-T Ethernet Port
- 1x USB 3.0 Type A Connector with Host Interface

## Reception-Demodulation

- DOCSIS 3.1/3.0/2.0
- DOCSIS 3.1 Demodulation: Multi-carrier OFDM 16 to 4096QAM
- DOCSIS 3.1 Data Rate: Up to 10Gbps*
- DOCSIS 3.0 Demodulation: 64QAM, 256QAM
- DOCSIS 3.0 Data Rate: Up to 1.2Gbps with 32 Bonded Downstream Channels
- Frequency (edge-to-edge): 258-1002MHz
- Channel Bandwidth: 6MHz
- Signal Level: 15dBmV

## Transmitter-Modulation

- DOCSIS 3.1/3.0/2.0
- DOCSIS 3.1 Modulation: Multi-carrier OFDMA BPSK to 4096QAM
- DOCSIS 3.1 Data Rate: Up to 1Gbps 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
- Frequency: Switchable 5-85MHz / 5-204MHz
- Upstream Transmit Signal Level: +11 to 65dBmV

## Wi-Fi

Wi-Fi Characteristics

- 802.11a/b/g/n/ac/ax
- 4T4R 2.4GHz 11ax and 4T4R 5GHz 11ax Dual Band Concurrent MU-MIMO with 1.2Gbps + 4.8Gbps PHY Rate
- 20/40/80/160MHz Channel Bandwidth
- High Power Design for Multi-radio Co-location
- Supports Standard 5GHz UNII Bands

Wi-Fi Features

- Up to 8 SSIDs per Radio
- Prioritized QoS: WMM/WMM-PS
- 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

Wi-Fi Security

- WPA-PSK
- WPA2-PSK (TKIP/AES)
- WPA3-SAE

## MoCA 2.0 Reception/Transmitter-Modulation

- Demodulation/ Modulation: BPSK, QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 512QAM, 1024QAM
- PHY Data Rate:
  - 700Mbps (Baseline Mode)
  - 1400Mbps (Bonding Channel)
- Throughput:
  - 400+Mbps (Baseline Mode)
  - 500+Mbps (Turbo Mode, Point-to-Point)
  - 800Mbps (Bonding Channel)
- Frequency (Center Frequencies): 1125-1675MHz
- Channel Bandwidth:
  - 100MHz (Baseline Mode)
  - 225MHz (Bonding Channel)

## Routing Support

- Protocol Support: IGMP v3 for IPTV service capability
- MAC Address Filtering (IPv4/IPv6)
- IP Source/Destination Address Filtering (IPv4/IPv6)
- DHCP, TFTP and ToD clients (IPv4/IPv6)
- DHCP Server supports RFC 1541 (IPv4)
- DHCPv6 obtains Prefix from DHCPv6 Server through Prefix Delegation
- 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)
- DSLite Support for IPv4 In-home Support with IPv6 MSO Backbone
- 6RD Support for Quick IPv6 Deployment over IPv4 Backbone
- RIPv2 for Static IP Support
- LAN-as-WAN function for the deployment of standalone Wi-Fi Router mode

## Management

- Protocol Support: TR-069, TFTP, SSHv2, SNMP v2, v3
- Web-based GUI Control, Configuration and Management
- Power-on Self-Diagnostic
- Hitron-proprietary MIBs for Extended Support on DOCSIS, Router Management, Wi-Fi Management and MoCA Management
- MyHitron App Support
- HitronCloud and OptiMy Backend Support

## Mechanical

- LEDs: One Multi-colored LED
- Factory Default Reset Button
- WPS Button
- Dimensions: 251.5mm (H) x 74.3mm (W) x 230.8mm (D)
- Net Weight: 1850 +/- 10g

## Electrical

- Input Power: 12VDC, 4.5A
- Power Adaptor: 100-240VAC, 50/60Hz
- Power Consumption: 4.92W (power saving), 22W (typ.), 38W (Max)
- 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
- CableLabs
- FCC Part 15 Class B Subpart B, Part 15.247, Part 15.407, Part 2.1091
- ICES-003 Issue 6, Class B
- RSS-102 Issue 5
- IC RSS-247 Issue 2, 2017-02 and RSS-Gen Issue 5, 2018-4
- Canada RSS-Gen Issue 5, Amendment 1, Mar 2019
- UL 62368-1
- cUL 62368-1-14

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Specifications subject to change without further notice. Product photo may differ.

DOCSIS 3.1 is a CableLabs standard for high speed Internet access that defines support for up to 10 Gbps downstream and 1 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: CODA5712-D-003