



DOCSIS 3.1 Cable Modem Router

with Wi-Fi 6, Voice and
Extended Downstream 1218MHz

CODA-5814



The powerful CODA-5814 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-5814 offers bonded MOCA 2.0 and 2.5GigE wired ports, along with two HD voice ports. This powerful hub can meet virtually any home and small business networking need.

Software-switchable Frequency

You can seamlessly support today's and tomorrow's upstream bandwidth demands with the software switchable return path. Want to upgrade customers to higher-tier upstream speeds? No problem. You can remotely change to the high-split (5-204MHz) return path at any time – there's no need to swap out hardware or send out a technician.

Extended Downstream up to 1218 MHz

Future proof your network and offer even faster speeds by expanding the downstream frequency range up to 1218MHz.

Key Features

- DOCSIS 3.1 2x2 OFDM/OFDMA
- DOCSIS 3.0 32x8 Channel Bonding
- Switchable Upstream: 5-85MHz / 5-204MHz
- Extended Downstream 1218MHz
- 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
- One 2.5 GigE and two 1 GigE Ports
- Two HD Voice Ports, SIP and MGCP Support
- TR-069 and HNAP for Easy Setup and Remote Management
- Hitron Ecosystem Support (OptiMy, HitronCloud, MyHitron)



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
- 2x RJ-11 HD Voice Ports
- 1x 3.5mm Jack for Option Hitron Battery Back-up

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): 108-1218MHz
- 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

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)
- 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)
- Support Idle Voice Service for 24-hour Power Outage with Hitron's External Battery
- 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)

Optional Accessories

- EBBU-0014: External Battery Back-up (24h)
- Replacement Batteries

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



I.T.V F219020