



hitron DOCSIS 3.1 Wi-Fi 6 and eMTA Gateway CODA-5519 User Guide

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KEY FEATURES

- IPv6 routing
- MoCA 2.0 channel bonding
- TR-069 and HNAP for easy setup and remote management
- Enhanced management and stability for low total cost of ownership
- One 2.5G and Two 1G Ethernet ports
- Hitron Ecosystem Support (OptiMy, HitronCloud, MyHitron)
- 2 HD voice ports with SIP or MGCP support
- DOCSIS 3.1 2x2 multi-carrier OFDM
- DOCSIS 3.0 32x8 channel bonding
- 4x4 2.4GHz 802.11ax and 4x4 5GHz 802.11ax dual band concurrent MU-MIMO internal antennas
- 16 SSIDs (8SSIDs per radio)
- Individual configuration for each SSID (security, bridging, routing, firewall and Wi-Fi parameters)
- Extensive operator control via configuration file and SNMP
- Integrated DLNA Media Server with support for video, audio and image serving

HIGH PERFORMANCE INTERNET AND WIRELESS ACCESS

The CODA-5519 is a powerful router that will be used as the heart of your wireless home. It will offer strong WiFi that will covers most houses. The CODA-5519 has the capability to receive 5Gbps bi-directional based on 2 OFDM + 32 QAM downstream channels and with 2 OFDMA + 8 upstream channels over its DOCSIS 3.1 interface. The integrated Wi-Fi 4x4 2.4 GHz 802.11ax and 4x4 5 GHz 802.11ax dual band MU-MIMO Access Point significantly improves customer experience extending range and coverage with blazing speeds. For wired clients, 2.5G plus two Gigabit Ethernet ports offer ultra-fast connection. It can be paired with Hitron extenders/mesh pods for extra coverage.

SECURE WIRELESS NETWORKING CONTROLLED AT THE TIP OF YOUR FINGERS

The CODA-5519 supports pre-configured and pre-enabled Wi-Fi security via Wi-Fi Protected Setup (WPS),

allowing the end-user to rapidly set up a secure wireless network without manual configuration. Hitron's AutoSync software provides secure automated setup of extenders in the customer's home or business.

It comes with MyHitron (end user management mobile application). MSO can also get extra management and analytics via HitronCloud/OptiMy CSR interface from the support center.






SPECIFICATIONS

Connectivity

- RF F-Type 75 female connector
- 2x RJ-45 Ethernet port 10/100/1000Mbps
- 1x RJ-45 Ethernet port 10/100/1000/2500Mbps
- USB 3.0 type A connector with host interface
- 2x RJ-11 HD voice ports
- EBBU jack

Management

- **Protocol support:** TR-069, TFTP, SSHv2, SNMP v2C, 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
-  app support
-  and  back end support



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 5Gps with 2 OFDM 192MHz downstream channels +32 QA
- DOCSIS 3.0 demodulation: 64QAM, 256QAM
- DOCSIS 3.0 data rate: Up to 1.2Gbps with 32 bonded downstream channels
- **Frequency (edge-to-edge):** 108-1002MHz
- Channel Bandwidth: 6MHz · Signal level: -15dBmV to 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 700Mbps 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: Fixed 5-85MHz
- Upstream transmit signal level: +11 to 65dBm

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)

Voice

- **Protocol support:** SIP or MGCP
- 2x 8kHz each HD voice
- **Audio codecs:** G.711 (a-law and mu-law), G.722 (HD codec), G.723.1, G.726, G.728, and G.729

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

Wireless

- 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
- Up to 8 SSIDs for each frequency
- **Security:** WPA-PSK/WPA2-PSK (TKIP/AES), WPA3, WAPI
- **QoS:** WMM/WMM-PS · 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

Electrical

- **Input power:** 12VDC, 4A
- **Power adaptor:** 100-240VAC, 50/60Hz
- **Power consumption:** 4.92 (power saving), 22W (typ.), 38W (Max)
- Support power outage for 24 hours on Hitron external battery
- Surge **protection:** RF input sustains at least 4KV Ethernet RJ-45 sustains at least 4KV

Mechanical

- Factory default reset button

- WPS button
- **Dimensions:** 74.3mm (W) x 251.5mm (H) x 230.8mm (D)
- **Weight:** Weight: 1850 ± 10g 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)

Compliance Certificates

- RoHS compliant
- FCC, IC, UL



CODA-5519-2019_1A – Issued Mar 2020

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Documents / Resources

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