

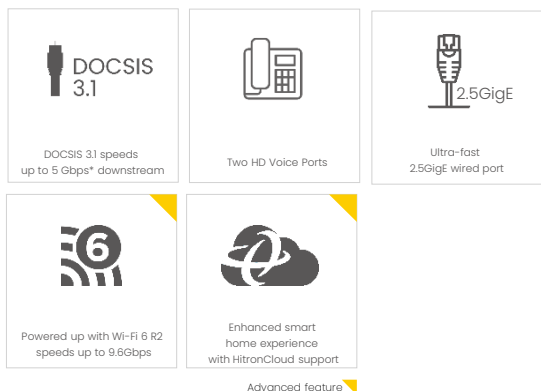


# DOCSIS 3.1 Cable Gateway with Wi-Fi 6 R2 and Voice



CODA5519W

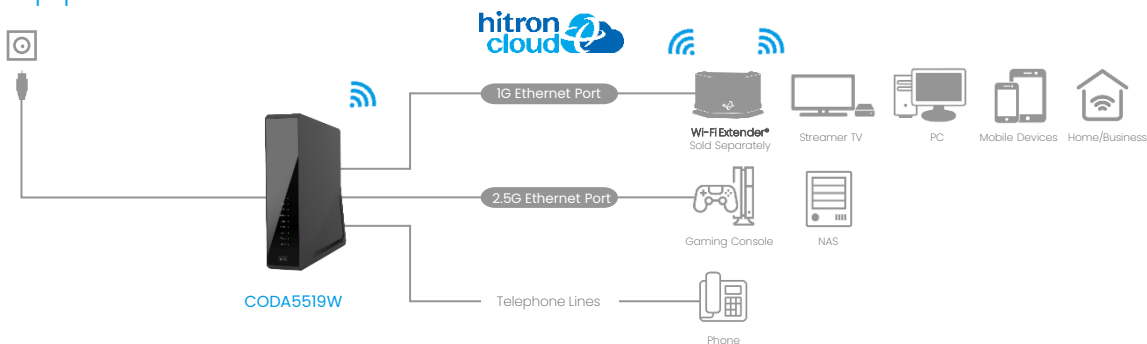
The powerful CODA5519W cable gateway forms the heart of the wireless home, featuring the next-generation to provide ultimate digital home experience: stunning 4K and 8K streaming, shutter-free VR applications, a flawless smart home, video conferencing and more. CODA5519W can meet virtually any home and small business networking need.



## Key Features

- DOCSIS 3.1 2x2 OFDM/OFDMA
- DOCSIS/EuroDOCSIS 3.0 32x8 Channel Bonding
- 4x4 2.4GHz 802.11ax R2 and 4x4 5GHz 802.11ax R2 Dual-band Concurrent MU-MIMO Internal Antennas
- 16 SSIDs (8 SSIDs per Radio)
- Individual Configuration for each SSID
- One 2.5 GigE and three 1 GigE Ports
- Two HD Voice Ports
- SIP and MGCP Support
- TR-069 and HNAP for Easy Setup and Remote Management
- Optional HitronCloud home network management support

## Application



# Specifications

# CODA5519W

## Reception-Demodulation

- DOCSIS 3.1/3.0/2.0 with EuroDOCSIS compliant
- DOCSIS 3.1 Demodulation: Multi-carrier OFDM 16 to 4096QAM
- DOCSIS 3.1 Data Rate: Up to 5Gbps with 2 OFDM 192MHz
- Downstream Channels + 32 SC-QAM
- DOCSIS/EuroDOCSIS 3.0 Demodulation: 64QAM, 256QAM
- DOCSIS/EuroDOCSIS 3.0 Data Rate: Up to 1.3/1.7Gbps with 32 Bonded Downstream Channels
- Frequency (edge-to-edge): 108-1218MHz / 258-1218MHz
- Channel Bandwidth: 6MHz/8MHz (DOCSIS/EuroDOCSIS)
- Signal Level: -15dBmV to 15dBmV

## Transmitter-Modulation

- DOCSIS 3.1/3.0/2.0 with EuroDOCSIS compliant
- DOCSIS 3.1 Modulation: Multi-carrier OFDM BPSK to 4096QAM
- DOCSIS 3.1 Data Rate: Up to 700Mbps with OFDM 96MHz Upstream Channels
- DOCSIS 3.0 Modulation: QPSK, 8QAM, 16QAM, 32QAM, 64QAM, and 128QAM (SCDMA only)
- DOCSIS/EuroDOCSIS 3.0 Data Rate: Up to 320Mbps with 8 bonded Upstream Channels
- Frequency: Switchable 5-85 / 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

## 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

## 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 Codescs

- G.711 (a-law and mu-law)
- G.722 (HD codec)
- G.7231
- G.726
- G.728
- G.729

### AMR (narrowband)

- Adaptive Jitter Buffer
- G167 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

### 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
- HitronCloud cloud-based platform backend support

## Interfaces

- 1x RF F-Type 75Ω Female Connector
- 3x 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-II HD Voice Ports

## Mechanical

- 9 status LEDs (Power, DS, US, Status, LAN, 2.4G, 5G, TEL/2, WPS)
- Factory Default Reset Button
- WPS Button
- Dimensions: 232mm (H) x 74mm (W) x 210mm (D)
- Net 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)

## Electrical

- Input Power: 12VDC, 4A
- 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

## Optional Accessories

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

## Regulatory Compliance (Under Planning)

- RoHS
- CableLabs
- WiFi Alliance WiFi 6 R2
- FCC Part 15 Class B Subpart B, Part 15.247, Part 15.407, Part 21091
- 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



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 5 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.

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