



DOCSIS 3.1 Cable Modem Router

with Wi-Fi 6E and Extended
Downstream 1218MHz

CODA5830



The powerful CODA5830 cable gateway forms the heart of today and tomorrow's wireless home. The gateway supports DOCSIS 3.1 – up to 6 Gbps* downstream – and next generation Wi-Fi 6E Tri-Band Router speeds up to 11 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 CODA5830 offers 3 Ethernet ports with one being 2.5GigE. This powerful hub can meet virtually any home and small business networking need.

Faster Wi-Fi with Tri-Band

This CODA5830 is equipped with a third band in the 6GHz frequency which can be used for Wi-Fi backhaul. Utilizing seven (7) continuous 160MHz channels, the CODA5830 can support multiple clear channels, free from neighborhood Wi-Fi interference. It uses the 2.4GHz and 5GHz bands for common IoT and mobile device support.

Switchable Frequency

You can seamlessly support today and tomorrow bandwidth demands with the software switchable upstream and downstream path. Want to upgrade customers to higher-tier speeds? No problem. You can remotely change band split options between (5-85MHz / 108-1218MHz) or (5-204MHz / 258-1218MHz) at any time. There's no 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
- Extended Downstream 1218MHz
- 4x4 2.4GHz 802.11ax, 4x4 5GHz 802.11ax and 4x4 6GHz 802.11ax Tri-band Concurrent MU-MIMO Internal Antennas
- 24 SSIDs (8 SSIDs per Radio)
- Individual Configuration for each SSID
- One 2.5 GigE and two 1 GigE Ports
- TR-069, TR-369 and Remote Management
- Hitron Ecosystem Support (OptiMy, HitronCloud, MyHitron+)
- Low Latency DOCSIS



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

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 6 Gbps*
- DOCSIS 3.0 Demodulation: 64QAM, 256QAM
- DOCSIS 3.0 Data Rate: Up to 1.2 Gbps with 32 Bonded Downstream Channels
- Frequency (edge-to-edge): Swatchable 108-1002MHz/258-1218 MHz
- Channel Bandwidth: 6MHz
- Signal Level: -15 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 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
- 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
- AX11000 Next-Gen Tri-Band Router
- 4x4 2.4GHz 802.11ax, 4x4 5GHz 802.11ax and 4x4 6GHz 802.11ax Tri-band concurrent MU-MIMO Internal Antenna with 1.2Gbps + 4.8Gbps PHY Rate + 4.8Gbps PHY Rate
- 20/40/80/160MHz Channel Bandwidth
- Support Wi-Fi 6 R2: UL MU-MIMO, DL/UL MU-MIMO, OFDMA beamforming and BSS coloring

Wi-Fi Features

- Up to 8 SSIDs per Radio
- Prioritized QoS: WMM/WMM-PS
- Transmit Power Control
- WPS (Wi-Fi Protected Setup) Push Button, PIN
- Airtime Fairness (ATF)
- Band Steering (BS)
- Zero wait Dynamic Frequency Selection (ZDFS)
- Wi-Fi Output Power Range: Max permitted by FCC/IC
- Configurable Regulatory Domain

Wi-Fi Security

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

Routing Support

- Protocol Support: IGMP v3 for IPTV service capability
- MAC Address Filtering
- IP Source/Destination Address Filtering (IPv4/IPv6)
- DHCP, TFTP, ToD and SNTP 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
- 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, TR-369, 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, and Wi-Fi 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: 1950 +/- 10g

Electrical

- Input Power: 12VDC, 4.5A
- Power Adaptor: 100-240VAC, 50/60Hz
- Power Consumption: 50W 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 7, Class B
- RSS-102 Issue 5
- IC RSS-247 Issue 2
- IC RSS-GEN Issue 5
- UL 62368-1
- cUL 62368-1-14



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