DOCSIS 3.1 WIFI GATEWAY

Intel® Puma™ 2 OFDM 2x2 w/ 3x3 2.4 GHz 802.11n + 4x4 5 GHz 802.11ac Wave 2 dual band and MoCA 2.0 channel bonding

DOCSIS 3.1 2 downstream x 2 upstream Multi-carrier OFDM
DOCSIS 3.0 32 downstream x 8 upstream channel bonding
3x3 2.4 GHz 802.11n and 4x4 5 GHz 802.11ac Wave 2 dual band concurrent MU-MIMO AP
Multiple SSIDs - 8 SSIDs per radio
SNMP+TR-069
IPv6 routing
MoCA 2.0 Bonding

FASTEST WAN AND LAN CONNECTION
The CODA-4582 has the capability to receive 5Gbps based on 2 x OFDM + 32 QAM over its DOCSIS 3.1 interface. The integrated Wi-Fi 3x3 2.4 GHz 802.11n and 4x4 5 GHz 802.11ac Wave 2 dual band concurrent MU-MIMO Access Point significantly improves customer experience extending range and coverage with blazing speeds. For wired clients, the four Gigabit Ethernet ports offer ultra-fast connections. MoCA 2.0 bonding provides a near-Gigabit wired backbone in the customer’s home for WiFi extension.

IPV4/IPV6 DUAL STACK SUPPORT
The CODA-4582 supports full IPv4 routing features, as well as full support for IPv6 routing and firewall. The CODA-4582 supports both DSLite as well as 6RD for different IPv6 deployment and transition strategies.

SECURE WIRELESS NETWORKING
The CODA-4582 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.

KEY FEATURES

- DOCSIS 3.1 compliant and DOCSIS 3.1 certified
- Wi-Fi 3x3 2.4 GHz 802.11n and 4x4 5 GHz 802.11ac Wave 2 dual band concurrent MU-MIMO internal antennas
  ▶ 16 SSIDs (8 SSIDs per radio)
  ▶ Individual configuration for each SSID (security, bridging, routing, firewall and WiFi parameters)
- One USB 3.0 host, supporting Network Attached Storage (NAS) functionality
- Integrated DLNA Media Server with support for video, audio and image serving
- Extensive operator control via configuration file and SNMP
- Well-defined LEDs clearly display device and network status
- TR-069 and HNAP for easy setup and remote management
- Enhanced management and stability for low total cost of ownership
- MoCA Channel Bonding for highest performance
**Protocol Support**
- DOCSIS 2.0/3.0/3.1
- SNMP v1, v2C, v3
- IGMP
- TR-069
- HNAP
- Connectivity
  - RF F-type female 75Ω connector
  - 4x RJ-45 Ethernet port 10/100/1000 Mbps
  - USB 3.0 Type A connector with Host interface
- Management
  - Web-based GUI control configuration and management
  - Easy-to-read LEDs clearly display network status and activity
  - Power on self diagnostic
  - Hitron proprietary MIBs for extended support on DOCSIS, Router Management, Wi-Fi Management and MoCA Management

**Reception-Demodulation**
- DOCSIS 3.0 Demodulation: 64QAM, 256QAM
- DOCSIS 3.0 Data rate: Up to 1.2Gbps with 32 bonded downstream channels
- 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 QAM
- Frequency (edge-to-edge): 108 ~ 1002 MHz
- Channel Bandwidth: 6 MHz
- Signal Level: -15 dBmV to 15 dBmV
- Input return loss: >6dB

**Transmitter-Modulation**
- DOCSIS 3.0 Modulation: QPSK, 8QAM, 16QAM, 32QAM, 64QAM, and 128QAM (SCDMA only)
- DOCSIS 3.0 Data rate up to 320 Mbps with 8 upstream channel bonding
- DOCSIS 3.1 Modulation: Multi-carrier OFDMA BPSK to 4096QAM
- DOCSIS 3.1 Data rate Up to 700Mbps with 1 OFDMA 80MHz upstream channels
- Frequency: 5-85 MHz
- Upstream transmit Signal Level: +11 to 65 dBmV
- Output return loss: >6dB

**MoCA 2.0 Reception / Transmitter-Modulation**
- Demodulation/ Modulation:
  - BPSK, QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 512QAM, 1024QAM
- Data Rate: 700 Mbps (Baseline Mode) / 1400 Mbps (Bonding channel)
- Throughput: 400+ Mbps (Baseline Mode) / 500+ Mbps (Baseline Mode, point to point) / 800 Mbps (Bonding channel)
- Frequency range: 11.25 ~ 1675 MHz
- Channel Bandwidth: 100 MHz (Baseline Mode) / 225 MHz (Bonding channel)

**Compliance Certificates**
- FCC
- UL
- RoHS Compliant

**Routing Support**
- 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
- 3T3R 2.4GHz (2412MHz~2462MHz) 11n + 4T4R 5GHz (5180MHz~5240MHz) 11ac Wave 2 dual band concurrent with 450Mbps+1733Mbps PHY data rate
- 20/40/80/160 MHz channel bandwidth
- Up to 8 SSIDs for each frequency
- Security: WEP-64/WE-TTP-128, WPA-PSK/WPA2-PSK (TKIP/AES), WAPI
- QoS: WMM/WMM-PS
- WPS (Wi-Fi Protected Setup) PBC, PIN
- Fast Roaming: 802.11r, 802.11k, 802.11v
- Support Band Steering

**Mechanical**
- 7 status LEDs (Power, DS, US, Status, Wi-Fi 2.4G, Wi-Fi 5G, MoCA)
- WPS button
- Factory reset button
- Dimensions: 120mm (W) x 120mm (H) x 225mm (D)
- Weight: 800g ± 10g

**Environmental**
- Power: 100 ~ 120 VAC, 50/60Hz
- Power Consumption: 5W (power save mode), 18W (typical operation), 36W (Maximum)
- Operating Temperature: 0°C (32°F) ~ 40°C (104°F)
- Operating Humidity: 10% ~ 90% (Non-condensing)
- Storage Temperature: -40°C (-40°F) ~ 70°C (158°F)
- Surge Protection: RF input sustains at least 4KV, Ethernet RJ-45 sustains at least 4KV