MULTI-GIGABIT DOCSIS 3.1 CABLE MODEM with MoCA

Intel® Puma™ 7 2x2 OFDM /w Fixed 5-85MHz US,
MoCA 2.0 channel bonding, GigE

KEY FEATURES

- DOCSIS 3.1 certified
- DOCSIS 3.1 2x2 multi-carrier OFDM
- DOCSIS 3.0 32x8 channel bonding
- Fixed 5~85MHz upstream
- Supports Business Services over DOCSIS
- Extensive operator control via configuration file and SNMP

- MoCA Channel bonding for highest performance
  - Optional Wi-Fi extension via MoCA-to-Wi-Fi Extender
- Built in MoCA® immunity filter
- Full-featured, high bandwidth cable modem

HIGH-PERFORMANCE MODEM THAT CAN BE USED AS WI-FI DISTRIBUTED GATEWAY

CODA-4502 is a powerful solution for delivering high powered broadband services for residential and business customers delivering speeds up to 1.97Gbps based on 2 GigE ports with two bonded downstream channels over its DOCSIS 3.1 interface. This is the device for MSOs wanting to market the most robust broadband services in support of high demand residential or small commercial environments where requirements for telecommuting, interactive multimedia services with HD and UHD video on demand over IP connectivity are required. The four Gigabit Ethernet ports offer ultra-fast connections. MoCA 2.0 bonding provides a near-Gigabit wired backbone for Wi-Fi extension. A completely self installable solution that, when paired with Hitron's MoCA-to-WiFi extenders, offer WiFi coverage to every corner and WiFi client device in the home. The MyHitron app works seamlessly truly offering a demarcation to the finger tips. The CODA-4502 is an intelligent device that enhances its basic data transmission features with IPv6 support, which makes it especially suitable for the transmission of data based on this protocol.

FAST, SIMPLE DEPLOYMENT, MONITORING AND MANAGEMENT

Installation of the CODA-4502 is quick, straight-forward, and can be carried out by the end-user. With it self-install capability, the built-in TFTP client automatically gets the IP address and configuration data from the network server once connected. A browser-based utility allows convenient viewing of key network statistics and provide access to the AutoSync feature in case a Hitron's Wi-Fi Extenders is added to customer's network. SNMP support provides total remote control over the device.

| ■ Coax |
| ■ Ethernet |
| 🛜 Wi-Fi |

CODA-4502

Cable Plant

PC

Gaming Console

Printer   Smartphone   Tablet   Streamer   TV

TV

PC

Home Security   Thermostat   Laptop

Wi-Fi Extender

Internet

SPECIFICATIONS

Connectivity
- RF F-type 75Ω female connector
- 2x RJ-45 Ethernet port 10/100/1000 Mbps (Auto-MDI/MDIX)

Management
- Protocol support: SNMP v1, v2C, v3
- Web-based GUI control configuration and management
- LEDs clearly display network status and activity
- Power on self diagnostic
- MIB II/MCNS MIB
- Hitron proprietary MIBs for extended support

Reception-Demodulation
- DOCSIS 3.1/3.0/2.0
- Protocol support: BSoD
- DOCSIS 3.1 demodulation: Multi-carrier OFDM 16 to 4096QAM
- DOCSIS 3.1 data rate: Up to 1.97Gbps with 2 OFDM 192MHz downstream channels + 32 6MHz QAM channels
- 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 to 15dBmV
- Input return loss: >6dB

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 upstream channels bonding
- Frequency: 5-85MHz
- Upstream transmit signal level: +11 to 65dBmV
- Output return loss: >6dB

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 range: 1125-1675MHz
- Channel bandwidth: 100MHz (baseline mode) / 225MHz (bonding channel)

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

Mechanical
- 6 status LEDs (Power, DS, US, Status, LAN, MoCA)
- Factory default reset button
- Dimensions: 144.5mm (W) x 166mm (H) x 51mm (D)
- Weight: 470g ± 10g

Electrical
- Input Power: DC12V, 2A
- Power adaptor: 100-240VAC (50/60Hz) to DC12V/2A
- Power consumption: 15W (typical)
- Surge protection:
  - RF input sustains at least 4KV
  - Ethernet RJ-45 sustains at least 4KV

Environmental
- Operating temperature: 32°F (0°C) to 104°F (40°C)
- Operating humidity: 10%-90% (non-condensing)
- Storage temperature: -40°F (-40°C) to 140°F (60°C)

Compliance Certificates
- RoHS compliant
- FCC, IC