

# **DOCSIS 3.0 eMTA WIFI GATEWAY**

Intel® Puma™ 6-MG 24x4 w/ 2.4 GHz 802.11n + 5 GHz 802.11ac dual band and MoCA 2.0

# DOCSIS/EuroDOCSIS 3.0

24 downstream x 4 upstream channel bonding

Integrated 2.4 GHz 802.11n and 5 GHz 802.11ac dual band concurrent MIMO Access Point

Multiple SSIDs - 16 SSIDs per radio

SNMP+TR-069

IPv6 routing

2 voice ports with either SIP or MGCP support

MoCA 2.0



## **FASTEST WAN AND LAN CONNECTION**

The CGNVM-2459 has the capacity to receive 960Mbps over its DOCSIS interface with twenty-four bonded channels. The integrated Wi-Fi 2.4 GHz 802.11n and 5 GHz 802.11ac dual band 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 provides another extension option.

#### **IPV4/IPV6 DUAL STACK SUPPORT**

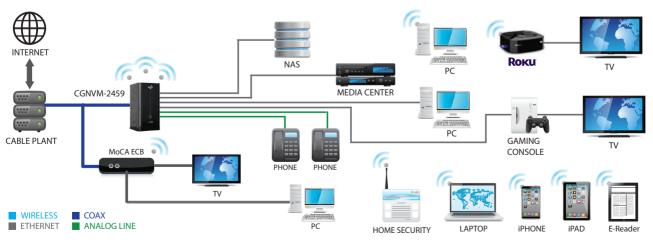
The CGNVM-2459 supports full IPv4 routing features, as well as, full support for IPv6 routing and firewall. The CGNVM-2459 supports both DSLite as well as 6RD for different IPv6 deployment and transition strategies.

#### SECURE WIRELESS NETWORKING

The CGNVM-2459 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/EuroDOCSIS3.0 compliant and DOCSIS3.0 certified
- Two USB 2.0 host, supporting Network Attached Storage (NAS) functionality
- Wi-Fi 2.4GHz 802.11n and 5GHz 802.11ac dual band MIMO internal
- ▶ 32 SSIDs (16 SSIDs per radio)
- ▶ Individual configuration for each SSID (security, bridging, routing, firewall and WiFi parameters)
- 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
- 2x FXS for telephony using SIP or MGCP
- MoCA for highest performance







# HIGH-PERFORMANCE INTERNET ACCESS AND WIRELESS

# **Protocol Support**

- DOCSIS/EuroDOCSIS 1.1/2.0/3.0
- SNMP v1, v2C, v3
- IGMP
- TR-069
- HNAP
- SIP & MGCP

## Connectivity

- RF F-type female 75Ω connector
- 4x RJ-45 Ethernet port 10/100/1000 Mbps
- 2x USB 2.0 Type A connector with Host interface
- 2x FXS RJ-11 telephony ports

#### 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

- Demodulation: 64QAM, 256QAM
- Data Rate: Up to 960 Mbps with 24 bonded downstream channels (DOCSIS)
- Frequency (edge-to-edge): 108 ~ 1002 MHz
- Channel Bandwidth: 6 MHz (DOCSIS, DOCSIS-J);
  8 MHz (EuroDOCSIS); 6/8 MHz (Dual Mode)
- Signal Level: -15 dBmV to 15 dBmV

# **Transmitter-Modulation**

- Modulation: QPSK, 8QAM, 16QAM, 32QAM, 64QAM, and 128QAM (SCDMA only)
- Data rate up to 120 Mbps with 4 upstream channel bonding
- Frequency: 5 ~ 42 MHz

# MoCA 2.0 Reception / Transmitter-Modulation

- Demodulation/ Modulation:
  BPSK, QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM, 512QAM, 1024QAM
- Data Rate: 700 Mbps (Baseline Mode)
- Throughput: 400+ Mbps (Baseline Mode) / 500+ Mbps (Baseline Mode, point to point)
- Frequency (center frequencies): 1025 ~ 1625 MHz
- Channel Bandwidth: 100 MHz (Baseline Mode)

# **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)
- VPN Termination and pass through (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+5GHz (5180MHz~5240MHz) 11ac dual band with 450Mbps+1300Mbps PHY data rate
- 20/40/80 MHz channel bandwidth
- Up to 16 SSIDs for each frequency
- Security: WEP-64/WEP-128, WPA-PSK/WPA2-PSK (TKIP/AES), WAPI
- QoS: WMM/WMM-PS
- WPS (Wi-Fi Protected Setup) PBC, PIN
- Output range: 13dBm; 18dBm

#### Mechanical

- 10 status LEDs (Power, DS, US, Status, Wi-Fi 2.4G, Wi-Fi 5G, Line 1/2, Battery, MoCA)
- WPS button
- Factory reset button
- Dimensions: 120mm (W) x 120mm (H) x 225mm (D)
- Weight: 800g ± 10g
- Battery back up with lithium battery cells

# Environmental

- Power: 100 ~ 120 VAC, 50/60Hz
- Power Consumption: 5W (power save mode), 18W (typical operation), 36W (Maximum)
- Operating Temperature:  $0^{\circ}$ C (32°F) ~  $40^{\circ}$ 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



