

## MULTI-GIGABIT DOCSIS 3.1 CABLE eMTA

Intel® Puma™ 7 2x2 OFDM with fixed 5-85MHz US, 2.5G Ethernet and Voice



### KEY FEATURES

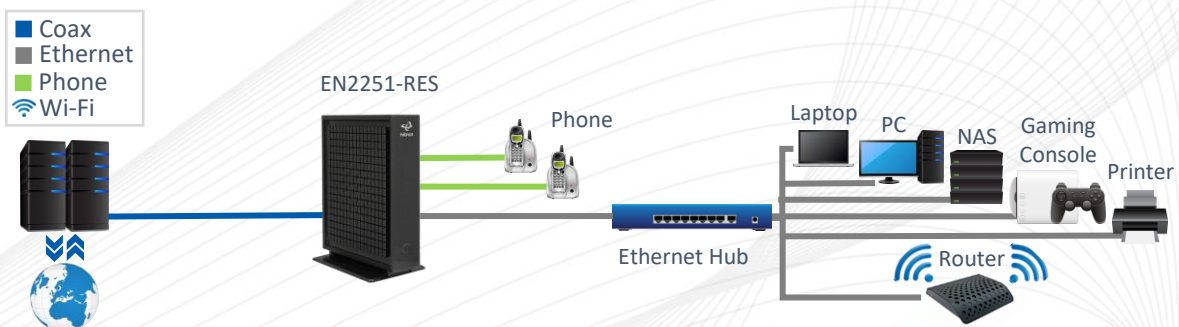
- DOCSIS 3.1 compliant
- DOCSIS 3.1 2x2 multi-carrier OFDM
- DOCSIS 3.0 32x8 channel bonding
- Fixed 5-85MHz upstream
- Extensive operator control via configuration file and SNMP
- Supports Business Services over DOCSIS
- 2 HD voice ports with SIP or MGCP support
- Built in MoCA immunity filter
- Full-featured, high bandwidth cable modem
- 2.5GigE LAN port
- Optional external battery available

### HIGH-PERFORMANCE, ALWAYS-ON INTERNET CONNECTION

EN2251-RES is a powerful solution for delivering high speed solution for residential and business customers delivering speeds up to 1.97Gbps based on 2.5GigE port with two bonded downstream channels over its DOCSIS 3.1 interface. The EN2251-RES allows MSOs to offer to their customers various broadband applications such as telecommuting, HD and UHD video on demand over IP connectivity to a small office/home office (SOHO), high-speed residential Internet access, interactive multimedia services, etc. The EN2251-RES 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 EN2251-RES is quick, straight-forward, and can be carried out by the end-user. Once connected, the built-in TFTP client automatically gets the IP address and configuration data from the network server without human intervention. A browser-based utility allows convenient viewing of key network statistics and SNMP support provides total remote control over the device.



## SPECIFICATIONS

### Connectivity

- RF F-type female 75Ω connector
- 1x RJ-45 Ethernet port 10/100/1000/2500Mbps (Auto-MDI/MDIX)
- 2x RJ-11 HD voice ports
- External battery port

### Management

- Protocol support: ToD clients (IPv4/IPv6), TFTP, 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, DHCP
- 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
- DOCSIS 3.0 demodulation: 64QAM, 256QAM
- DOCSIS 3.0 data rate: Up to 1.2Gbps with 32 bonded downstream channels
- Frequency (edge-to-edge): 108-1002MHz
- Channel bandwidth: 6MHz
- Signal level: -15dBmV to 15dBmV
- Input return loss: >6dB

### Voice

- Protocol support: SIP & MGCP
- 2x 8kHz each HD voice

### 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 720Mbps 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

### Mechanical

- 6 status LEDs (Power, DS, US, Online, Voice, Battery)
- Factory default reset button
- Dimensions: 177mm (W) x 213.8mm (H) x 95.4mm (D)
- Weight: 500g ± 10g

### Electrical

- Input power: 12VDC
- Power adaptor: 100-240VAC to DC12V, 50/60Hz, 2A
- Power consumption: 15W (typical)
- Surge protection:
  - RF input sustains at least 6KV
  - Ethernet RJ-45 sustains at least 4KV
- Voice support with Hitron EBBU: Over 24h

### 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 
- UL 
- CableLabs 



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