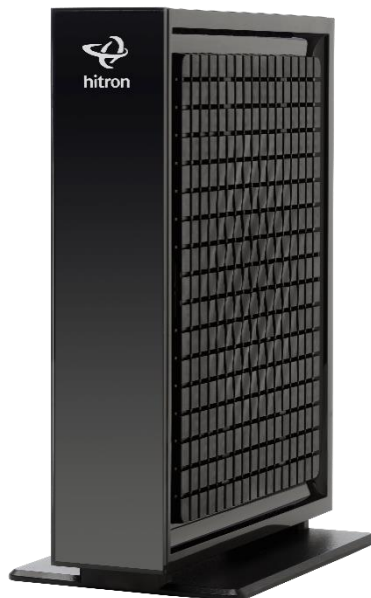


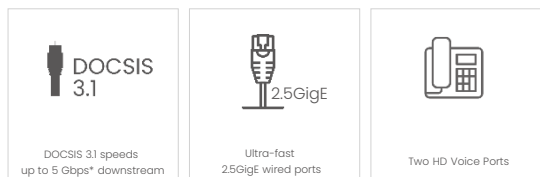


DOCSIS 3.1 Cable Modem with Voice

EN2251-RES



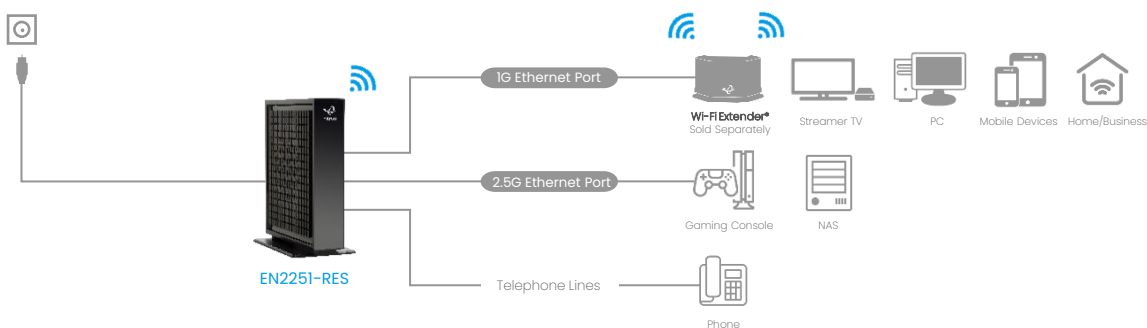
With support for DOCSIS 3.1, residential and business customers will enjoy the ultimate digital experience, today and tomorrow, with richer ultra-HD video streaming, faster online gaming, virtual reality applications, more reliable video conferencing and more. And one 2.5GigE port provides the fastest wired speeds to connect a Wi-Fi router, computer or other wired device.



Key Features

- DOCSIS 3.1 2x2 OFDM/OFDMA
- DOCSIS 3.0 32x8 Channel Bonding
- Fixed 5-85MHz
- One 2.5GigE Port
- Built-in MoCA Immunity Filter
- Supports Business Services over DOCSIS
- Two HD Voice Ports, SIP and MGCP Support

Application



Specifications

EN2251-RES

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 5Gbps*
- 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

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: Fixed 5-85MHz
- Upstream Transmit Signal Level: +11 to 65dBmV

Voice

General Voice Features

- SIP v2 Call, SIP v2 Call Control
- MGCP
- DNS SRV
- Hook Flash Event Signaling
- RTP Audio Transport
- RFC2833 RTP Payload
- SIP INFO
- InBand DTMF Mode
- HD Voice Ports with 16kHz sampling rates

Voice Audio Codecs

- G.711 (a-law and mu-law)
- G.722 (HD codec)
- G.723.1
- G.726
- G.728
- G.729
- AMR (narrowband)
- Adaptive Jitter Buffer
- G.167 Acoustic Echo Cancellation

FAX Relay Protocols Compliance

- T.38 Pass-through and over IP Fax/Modem Detection Control
- T.28 (IP) Compliant Group 3 and SG3 Fallback to Transport T.30
- V.34 Fax and Modem Bypass
- Automatic Fallback to G.711 support

CLASS Calling Features

- Call Waiting
- Call Hold
- Call Resume
- Call Forward Unconditional, Call Forward on Busy
- Caller ID
- 3-Way Conference
- Call Consultant
- Call Transfer and Network-initiated Class Services – MWI messaging, VMWI via FSK

Management

- Protocol Support: TR-069, 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, Wi-Fi Management and MoCA Management
- HitronCloud cloud-based platform backend support

Interfaces

- 1x RF F-Type 75Ω Female Connector
- 1x RJ-45 1/2.5GBASE-T Ethernet Port

Mechanical

- LEDs: 5 (Power, DS, US, Status, LAN)
- Factory Default Reset Button
- Dimensions: 204mm (H) x 177mm (W) x 45mm (D)
- Net Weight: 650 +/- 10g

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)

Electrical

- Input Power: 12VDC, 2A
- Power Adaptor: 100-240VAC, 50/60Hz
- Power Consumption: 8.23W (power saving), 9.68W (link), 16.93W (Max)
- Surge Protection
 - RF Input sustains at least 4KV
 - Ethernet RJ-45 sustains at least 4KV

Regulatory Compliance

- RoHS
- CableLabs
- FCC Part 15 Class B Subpart B, Part 15.247, Part 15.407, Part 2.1091
- ICES-003 Issue 6, Class B
- RSS-102 Issue 5
- IC RSS-247 Issue 2, 2017-02 and RSS-Gen Issue 5, 2018-4 Canada RSS-Gen Issue 5, Amendment 1, Mar 2019
- UL 62368-1
- cUL 62368-1-14



I.T.V F219020



Specifications subject to change without further notice. Product photo may differ.

DOCSIS 3.1 is a CableLabs standard for high speed Internet access that defines support for up to 5 Gbps downstream and 1 Gbps upstream. Actual cable operator network speeds will vary and will be less than the calculated maximum possible speeds. Actual upload and download speeds are affected by several factors including, but not limited to: the capacity of your cable operator's network, the services offered by your cable operator, cable and Internet network traffic, your computer equipment etc. Final speeds will also be limited by each device and the quality of its connection to the modem or router.

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