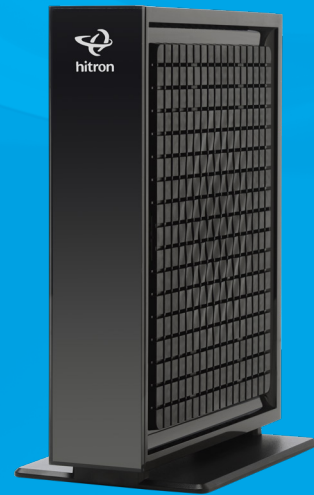




DOCSIS 3.1 Cable Modem with Voice

EN2251-RES



With support for DOCSIS 3.1 (download speeds up to 6 Gbps*), 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.

DOCSIS 3.1 Certified

DOCSIS 3.1 takes Internet speeds to a new level, increasing the capacity of HFC networks by more than 50 percent and reducing latency. This means your customers can connect more devices, enjoy richer digital experiences, and get fast, reliable Internet service for all of today and tomorrow's needs.

Ultra-fast 2.5 GigE Port

For wired clients in the home theater or home office, a 2.5 GigE port offers ultra-fast connection to an HDTV, home office router and more.

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



Interfaces

- 1x RF F-Type 75Ω Female Connector
- 1x RJ-45 2.5GBASE-T Ethernet Port
- 2x RJ-11 HD Voice Ports

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 6Gbps*
- 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

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

Management

- Protocol Support: TFTP, SSHv2, SNMP v2, v3
- Web-based GUI Control, Configuration and Management
- Power-on Self-Diagnostic
- Hitron-proprietary MIBs for Extended Support on DOCSIS

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

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

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

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)

Regulatory Compliance

- RoHS
- CableLabs
- 47 CFR FCC Part 15, Subpart B, Class B
- ANSI C63.4:2014
- ICES-003 Issue 7, Class B
- UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07 Information Technology Equipment -Safety -Part 1: General Requirements.



I.T.V F219020