Touchstone TM3402

DOCSIS 3.1 Telephony Modem

FEATURES

• 2x2 OFDM/OFDMA DOCSIS$^©$ 3.1 channels

• 32x8 SCQAM DOCSIS$^©$ 3.0 channels

• Full Capture Bandwidth Tuner

• Switchable US filter options include: 5-42MHz or 5-85MHz

• DS frequency range: 108-1002MHz

• Multi Processor Technology (ARM and ATOM based Application Processor)

• 4 Port Gigabit Ethernet LAN and 2 RJ-11 VoIP ports

• Support for NCS, Legacy SIP, and PacketCable™ 2.0/1.5/1.0 signaling

• Multiple L2VPN BSoD support with OAM extensions

• PNM based network monitoring and diagnostics

• DS / US spectrum analyzer functionality

PRODUCT OVERVIEW

The TM3402 DOCSIS 3.1 implementation allows unprecedented data rates to be delivered to MSO customers, along with two lines of VoIP service based on PacketCable™ specifications. The TM3402 is designed to enable deployment of Gigabit+ data services. Switchable US filter provides for superior RF performance, reduce the potential for interference in the home network, and allows the flexibility required for MSO transitions from DOCSIS 3.0 to DOCSIS 3.1. Increased memory allows new applications to be deployed on the modem. Overall, this feature-packed unit is intended to serve as the hub of a subscriber network, connecting all IP-capable devices (Internet, Data, Voice and Video) throughout the customer premises.

With residential high-speed data service, MSO support becomes a top concern. The TM3402 distinguishes itself by providing tools to minimize the complexity of support. US and DS spectrum analysis along with proactive network management based diagnostics take the monitoring and diagnostic capabilities of the TM3402 to a premium level. OAM extensions to L2VPN allow for system-level provisioning and diagnostics. Multiple provisioning methods (SNMP, Configuration File, WebGUI access) allow custom-designed setup to be applied to monitor the end user more efficiently. Multiple remote access levels also ease manual configuration and control. The TM3402 is defining the future for advanced residential and SOHO services.

Touchstone TM3402 DOCSIS 3.1 Telephony Modem

DOCSIS 3.0 vs DOCSIS 3.1 Speeds

■ DS Max (Mbps)   ■ US Max (Mbps)
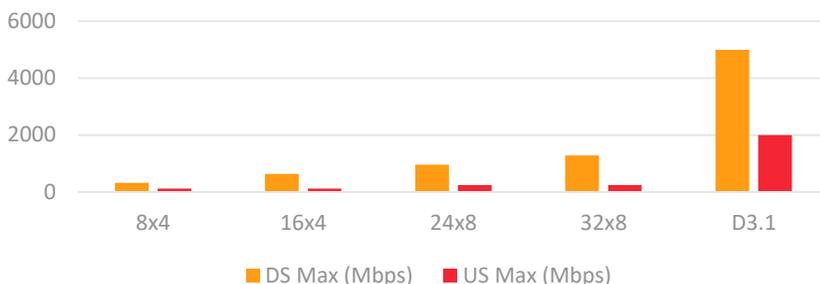
SPECIFICATIONS

Physical

Operating Temp (°C)	0 – 40
Operating Relative Humidity	5-85% (Non-Condensing)
Storage Temp (°C)	-40 to 70
Dimensions, HxWxD (in)	7.6 x 2.1 x 6.2
Weight (lbs) °C)	1.1
Diagnostic LEDs (Front)	Power, DS/US, Online, Tel1, Tel2, Battery
Diagnostic LEDs (Rear)	Ethernet Link/Speed

Interfaces

RF Interface	1 External 'F' Connector
Data Interfaces (Bridged)	4x 10/100/1000 Base-T Ethernet RJ-45
Telephone Interfaces	2x VoIP RJ-11
Input Voltage (Nominal)	12VDC, 2.5A (adapter) 100-240V, 50/60Hz, 0.8A

Voice

Standards Supported	PC2.0/1.5/1.0, RFC-3261
CODECs Supported	G.711, G.722, G.729
FAX	T.38
REN Capability	5 REN / Line, 10 REN Total
Line Card Support	Flexible LC Templates

SPECIFICATIONS

RF Downstream

Bonded Channels	Up to 32 SC-QAM and/or 2 OFDM
Tuner Configuration	Full Capture Tuning Range
Frequency Range (MHz)	108 – 1002 (DOCSIS)
Data Rate (Gbps, Max)	5.0
RF Input Sensitivity Level (dBmV)	-15 to +15 (DOCSIS)

RF Upstream

Bonded Channels	Up to 8 SC-QAM and/or 2 OFDMA
Frequency Range (MHz)	5 – 85 (DOCSIS)
Configurable Diplex Filter (MHz)	42 or 85 options
Data Rate (Gbps Max)	> 1.0
RF Output Level (dBmV)	+65 (64QAM, single US) +57 (64QAM, 4-8 US) +65 (16QAM, single US) +65 (OFDMA)

ORDERING NUMBERS

1000358	TM3402A/NA; D3.1 eMTA, 42/85MHz US, 108-1002MHz DS, 2x RJ-11, 4x GigE, Supports External LPSU, AC/DC Adapter (100-240VAC, 50/60Hz, NEMA1-15, DoE6), No USB, RoHS

CUSTOMER CARE

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656