

TG3452

TOUCHSTONE® CABLE VOICE GATEWAY, DOCSIS® 3.1 GATEWAY WITH 802.11AC WI-FI & MOCA® 2.0



FEATURES

- 2x2 OFDM and OFDMA DOCSIS® 3.1 channels
- 32x8 SCQAM DOCSIS® 3.0 channels
- Full Capture Bandwidth Tuner
- Multi Processor Technology with ARM and ATOM based Application Processor
- 4 port Gigabit Ethernet Router
- Switchable upstream filters for 42MHz or 85MHz operation.
- 4x4 Integrated Dual Band Concurrent 5GHz 802.11ac Wave2 radios and 3x3 2.4GHz 802.11n for high performance WLAN
- MoCA 2.0 (with channel bonding) for in Home Video and Data distribution over Coax
- Multiple SSID support with DFS channels and Dynamic Channel change
- Single PCB design
- Multiple operator controlled configuration options
- Designed for enhanced application support



PRODUCT OVERVIEW

The TG3452 Telephony Wireless Gateway supporting DOCSIS 3.1 allows unprecedented data rates to be delivered to MSO customers. The TG3452, along with its 4x4 802.11ac Dual Band Wireless radios, offers superior Wi-Fi performance enabling video over Wi-Fi.

The MoCA 2.0 interface with channel bonding enables the creation of a high performance home network. The switchable US diplex filter is designed to produce superior RF performance and ease of deployment on a DOCSIS 3.1 network.

Increased DRAM, Flash and Multiple embedded processor cores are designed to allow new applications to be deployed on the gateway. This feature-packed unit is intended to serve as the hub of the subscribers network, connecting all IP capable devices (Internet, Data, Voice and Video) throughout the customers premises.

Residential gateway support has always been a concern of the operator. The TG3452 distinguishes itself with capabilities to minimize these support needs. Multiple provisioning methods (SNMP, Configuration File, Remote WebGUI access, TFTP, and TR-069/181) allow custom designed setups to be applied to monitor the end user more efficiently. Multiple remote access levels (User, Cusadmin, and MSO) also allow more ease and flexibility for manual configuration and control.

The TG3452 will help lead the future to advanced home and small business services.

SPECIFICATIONS

Physical

Operating Temperature	0 to 50°C
Operating Relative Humidity	5-85% (Non condensing)
Storage Temperature	-40 to 70°C
Dimensions (H x W x D)	11.1in x 2.95in x 8.07in 282mm x 75mm x 205mm
Backup Capacity (not supplied)	External BBU
Weight	2.1lbs 0.95kg
Diagnostic LED's (Top)	Integrated LED for status of Power, US/DS, Online, 2.4GHz, 5GHz, Tel1, Tel2, Battery, MoCA
Diagnostic LED's (Rear)	MoCA, Ethernet Link/Speed

SPECIFICATIONS

Interfaces

RF Interface	1 External 'F' type connector
Date Interfaces (bridged)	4 x 10/100/1000 Base-T Ethernet (RJ-45 connector)
Analog Telephony Interface	2 lines; RJ-11
MoCA	MoCA 2.0
Input Voltage (nominal)	12V DC
AC-DC	External

SPECIFICATIONS

RF Downstream

Bonded Channels	Up to 32 SCQAM or 2 OFDM
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Tuner Configuration	Full capture tuning range
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Frequency Range (MHz)	108MHz - 1002MHz DOCSIS
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Data Rate (Mbps Max.)	Up to 5Gbps
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RF Input Sensitivity Level	-15dBmV to +15dBmV (DOCSIS)
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RF Upstream

Bonded Channels	Up to 8 SCQAM or 2 OFDMA
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Frequency Range	5MHz to 85MHz
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Configurable Diplex Filter	42MHz-85MHz
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Data Rate (Mbps Max.)	Up to 1Gbps
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RF Output Level	+65 dBmV (64 QAM, single upstream) +57 dBmV (64 QAM, 4-8 upstreams) +65 dBmV (16 QAM, single upstream)
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SPECIFICATIONS

Wireless

Frequency Range	2.4GHz and 5GHz
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Transmit Power (from any antenna)	+27dBm (MCS7) +26 dBm (MCS9)
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Spatial Streams	3 for 2.4GHz, 4 for 5GHz
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Receive Levels	2.4GHz <-88dBm 802.11n (MCS0) , <-71dBm 802.11n (MCS7), HT20 5.0GHz <-84dBm 802.11ac (MCS0) , <-57dBm 802.11ac (MCS9), VHT80
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Antennas	7 transmit, and 7 receive (total)
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MoCA

Frequency Range	1150MHz –1500MHz
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Network Channel Bandwidth	50MHz
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Max Transmit Power	+ 9 dBm max (adjustable)
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Max PhyRate	1400 Mbps
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Application Data Rate	800 Mbps bidirectional combined
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