Touchstone® DOCSIS® 3.0 Dual Band Concurrent Wireless Telephony Gateway TG1662G

Specifications

Physical

Operating Temperature °F (°C)	0 to 104 (0 to 40)
Operating Relative Humidity (Min-Max)	5-85% (Non condensing)
Storage Temperature °F (°C)	-40 to 158 (-40 to 70)
Color	Black
Dimensions (H x W x D) in.	10.8 x 8.2 x 2.3 - excluding F-connector
Backup Capacity	4 cell 2.2AH Lithium-ion for 8 hours operation. (718005 Battery Pack)
Battery Dimensions in.	1.2 x 1.95 x 5.5
Weight lbs	2.5 (With Battery included)
Battery Storage Temperature °F (°C)	-4 to 140 (-20 to 60) Note: Storage above 77ºF (25ºC) will significantly reduce life of the battery and is not recommended.
Telemetry	AC Fail, Battery Low, Battery Missing, Replace Battery
Diagnostic LEDs	Power, US/DS, Online, 2.4GHz, 5GHz, Tel1, Tel2, Battery

Interfaces

RF Interface	External 'F' type connector
Data Interfaces (bridged)	4 x 10/100/1000 Base-T Ethernet (RJ-45 connector)
Analog Telephony Interface	2 lines; RJ-14 ("Line 1/2"), RJ-11 ("Line 2")
USB Interface	USB 2.0 Powered Host Port
Input Voltage (nominal)	115VAC-240VAC, 50/60 Hz

Telephony

Supervisory Voltage	48 Vdc nominal
Maximum Loop Length to CPE	1000 ft (457M) of 26 AWG (0.4 mm) wire
Ringing Load Capacity	10 REN total; 5 per line
Provisionable High Loop Current Mode	Yes (40mA constant current source)
Programmable Interface for Worldwide Applications	Yes (supports multiple country templates)

RF Downstream

Bonded Channels	Up to 16
Tuner Configuration	Full capture tuning range
Frequency Range (MHz)	108-1002
Carrier Bandwidth (MHz)	6
Modulation (QAM)	64 or 256
Data Rate (Mbps Max.)	Up to 640
RF Input Sensitivity Level (dBmV)	-15 to +15

Technical Specification

Specifications Continued

RF Upstream

Bonded Channels	Up to 4
Frequency Range (MHz)	5 to 42
Modulation	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM & 128 QAM (S-CDMA only)
Data Rate (Mbps Max.)	up to 160
RF Output Level (dBmV)	ATDMA: +8 to 57 dBmV (32 QAM, 64 QAM) +8 to 58dBmV (8 QAM, 16 QAM) +8 to 61 dBmV (QPSK) S-CDMA: +8 to +56 dBmV (all modulations)
Automatic Level Adjust	Yes
Output Impedance (Ohms)	75

Wireless

Frequency Range	Simultaneous 2.5GHz and 5GHZ operation
Transmit Power	2.4GHz – 24.3 dBm +2/-2 dBm 802.11n MCS0 ; 24.3dBm +2/-2dBm 802.11n (MCS7). 5.0GHz – 26.3 dBm +2/-2 dBm 802.11n MCS0 ; 26.3 dBm +2/-2dBm 802.11n (MCS7). Includes MiMo additive power gains . Total system power is adaptable to maintain regulatory limits in the specific band of operation where necessary.
Receive Levels (all bands)	2.4GHz - <-86dBM 802.11n (MCS0) , <-74dBm 802.11n (MCS7) 5.0GHz - <-84dBM 802.11n (MCS0) , <-72dBm 802.11n (MCS7)
Spatial Streams	3
Antennas	3 transmit, and 3 receive (per band)

Standards

DOCSIS 3.0	IEEE Std. 802.11b, 1999 Edition
PacketCable 1.0 & 1.5	IEEE Std. 802.11g, 2002 Edition
Codec (64kbps): G.711 μ and A-law encoded speech, Enhanced G.722 HD	IEEE Std. 802.11n WiFi Alliance Certified
T.38 Fax Relay	FCC Part 15 Class B
IEEE 802.3, IEEE 802.3ab, IEEE 802.3x	UL® 60950
IEEE 802.1p, IEEE 802.1Q	ETSI and CE
	ROHS WEE

Battery back-up times are typical and can be influenced by the age of the battery, the charging state, storage conditions and operating temperature as well as factors such as data activity and length of active telephone calls. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice . Actual operating range may vary according to environmental conditions at the time of use.

Ordering Information

Part Number	Description
DOCSIS 3.0 Models	Touchstone; TG1662G Wireless eMTA DOCSIS 3.0 16x4, Dual Band Concurrent 3x3:3 802.11n radios, 4 Gigabit Ethernet, 115-240VAC, 50/60 Hz
800944	Touchstone TG1662G/NA-0, NEMA 1-15 Power Cord, no battery included
800948	Touchstone TG1662G/NA-8 , NEMA 1-15 Power Cord, 4 cell (#718005) Li-Ion Battery Pack for up to 8 hours of battery back-up
800943	Touchstone TG1662G/CE-0, CEE 7/16 Euro Power Cord, no battery included
800942	Touchstone TG1662G/CE-8 , CEE 7/16 Euro Power Cord, 4 cell (#718005) Li-Ion Battery Pack for up to 8 hours of battery back-up
Accessories	Please contact ARRIS for Specific Ordering Information and Options
	Battery Packs, Power Cords, Wall Mounting Brackets

Specifications are subject to change without notice.

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