TG852G DOCSIS® 3.0 Residential Gateway with 802.11n, 4 Port Router and 2 Voice Lines

Specifications

Physical

Operating Temperature °F (°C)	41 to 122 (5 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.	10.5 x 9.7 x 2.4 - excluding F-connector
Weight lbs	No battery included: 2.1
Backup Capacity	Lithium-ion 2.6 Ah for 8 hours operation. Consult ARRIS for other battery holdup time options.
Battery Dimensions in.	1.2 x 1.85 x 3.1
Weight lbs	1.0
Battery Storage Temperature °F (°C)	-4 to 140 (-20 to 60) Note: Storage above 77° F (25° C) will significantly reduce life of the battery and is not recommended.
Telemetry	AC Fail, Battery Low, Battery Missing, Replace Battery
Diagnostic LEDs	Power, DS, US, Online, Ethernet, WiFi, Secure, Tel 1, Tel 2, Battery

Interfaces

RF Interface	External 'F' type connector
Data Interfaces (bridged)	4 x 10/100/1000 Base-T Ethernet (RJ-45 connector)
Telephony Interface	2 lines; RJ-14 ("Line 1/2"), RJ-11 ("Line 2")
USB Interface	USB 2.0 Powered Host Port
Input Voltage (nominal)	100-240 Vac 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, NA templates ONLY)
Telcordia™ GR 1089 (Lightning and Power Surge) Tested	Yes
Programmable Interface for Worldwide Applications	Yes (supports multiple country templates)

RF Downstream

Bonded Channels	Up to 8
Tuner Configuration	2 tuning ranges of 48MHz each supporting 4 bonded channels
Frequency Range (MHz)	108-1002 DOCSIS
Carrier Bandwidth (MHz)	6 (DOCSIS)
Modulation (QAM)	64 or 256
Data Rate (Mbps Max.)	Up to 320 DOCSIS
RF Input Sensitivity Level (dBmV)	-15 to +15 (DOCSIS))

Technical Specification

Specifications Continued

RF Upstream

Bonded Channels	Up to 4
Frequency Range (MHz)	5 to 42 (DOCSIS)
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 54 dBmV (32 QAM, 64 QAM) +8 to 55 dBmV (8 QAM, 16 QAM) +8 to 58 dBmV (QPSK) S-CDMA: +8 to +53 dBmV (all modulations)
Automatic Level Adjust	Yes
Frequency Stability (kHz)	±5
Output Impedance (Ohms)	75

Wireless

Transmit Power Output (EIRP)	18dBm +2/-2dB 802.11b; 15dBm 2/2dB 802.11g/n
Receive Levels	>-86dBM 802.11b 11mbps; >-76dBm 802.11g 54mbps, >-76dBM 802.11n HT20 MCS7
Antennas	2 transmit, 3 receive

Standards

DOCSIS 3.0	IEEE 802.3, IEEE 802.3ab, IEEE 802.3x
PacketCable 1.0 & 1.5	IEEE 802.1p, IEEE 802.1Q
Codec: G.711, 64 kbps, μ and A-law encoded speech	IEEE Std. 802.11b, 1999 Edition
Enhanced codec firmware support (G.726, G.828, G.729E)	IEEE Std. 802.11g, 2002 Edition
T.38 Fax Relay	IEEE Std. 802.11n
	WiFi Alliance Certified
	UL® 60950
	FCC Part 15 Class B

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	PacketCable 1.0/1.5 Compliant Gateway, Integrated 100-240 VAC, 50/60 HZ Power supply with 6 foot power cord . Includes Quick Install Guide, Ethernet Cable, and CD-ROM with users guide
785197	Touchstone TG852G/CE-0 - CEE 7/16 Euro power plug - battery capable but no battery included
785199	Touchstone TG852G/CE-8 - CEE 7/16 Euro power plug - 2 cell, Li-Ion Battery Pack for up to 8 hours of battery back-up
785194	Touchstone TG852G/NA-0 - NEMA 1 power plug - battery capable but no battery included
785196	Touchstone TG852G/NA-8 - NEMA 1 power plug - 2 cell, Li-Ion Battery Pack for up to 8 hours of battery back-up
Accessories	
789699	2-Cell, 2.6 Ah, Li-Ion Battery Pack for TG852 (Battery models)
721198	North American NEMA 1-15 plug Power Cord, 6 foot
721197	European CEE 7/16 plug Power Cord, 6 foot

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