



Touchstone® TG862A/S 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)	8 x 8.2 x 2 inches, 20.3x20.8x5 cm - excluding F-connector
Weight	1.6lbs, .73kgs
Diagnostic LEDs	Power, DS, US, Online, Ethernet, Wi-Fi®, Secure, Tel 1, Tel 2

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 (Power Switch on “S” model)

Telephony

Supervisory Voltage	48 Vdc nominal
Maximum Loop Length to CPE	1000 ft (457M) of 26 AWG (0.4 mm) wire
Ringling 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 96MHz each supporting 8 bonded channels
Frequency Range (MHz)	108-1002
Carrier Bandwidth (MHz)	6 (DOCSIS), 8 (EuroDOCSIS™) (“S” Model)
Modulation (QAM)	64 or 256
Data Rate (Mbps Max.)	Up to 320 DOCSIS, Up to 420 EuroDOCSIS
RF Input Sensitivity Level (dBmV)	-15 to +15

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Technical Specification

ARRIS Technical Specification

Specifications Continued

RF Upstream

Bonded Channels	Up to 4
Frequency Range (MHz)	5 to 42 (DOCSIS), 5 to 65 (EuroDOCSIS)
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)	18.5dBm +1.5/-1.5dB 802.11g (6mbps); 13.5dBm +1.5/-1.5dB 802.11n (MCS 7)
Receive Levels	>-90dBm 802.11b 11mbps; >-76dBm 802.11g 54mbps, >-76dBm 802.11n HT20 MCS7
Frequency Range	2400-2483.5 MHz
Antennas	2 transmit and receive

Standards

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

Ordering Information

Part Number	Description
DOCSIS 3.0 Models	Gateway with 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
794084	Touchstone TG862A/CE - CEE 7/16 Euro power plug
794083	Touchstone TG862A/NA - NEMA 1 power plug
794086	Touchstone TG862S/CE – Power Switch, CEE 7/16 Euro power plug
796894	Touchstone TG862A/BR – CEE 7/16 Euro power plug
Accessories	
721198	North American NEMA 1-15 plug Power Cord, 6 foot
721197	European CEE 7/16 plug Power Cord, 6 foot

Specifications are subject to change without notice.

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