



Touchstone® TM602G Telephony Modem with Integrated Battery Back-up (Phase 1) Technical Specifications

Specifications

Physical

Operating Temperature °F (°C)	41 to 104 (5 to 40)
Operating Relative Humidity (Min-Max)	5-85% (Non condensing)
Storage Temperature °F (°C)	-40 to 158 (-40 to 70)
Color	Dark gray
Dimensions (H x W x D) in. (cm)	8.6 x 2.1 x 7.1 (21.8 x 5.3 x 18.0) - excluding F-connector
Weight lbs (kg)	No battery included: 1.2 (0.54)
Battery: 4 Hour Back-up Option (Dark Grey Case)	
Backup Capacity	Lithium-ion 2.2 Ah
Battery Dimensions in. (cm)	1.2 x 1.85 x 3.1 (3.0 x 4.7 x 7.9)
Weight lbs (kg)	1.5 (0.66)
Battery: 8 Hour Back-up Option (Light Grey Case)	
Backup Capacity	Lithium-ion 2.4 Ah
Battery Dimensions in. (cm)	1.2 x 1.85 x 3.1 (3.0 x 4.7 x 7.9)
Weight lbs (kg)	1.5 (0.66)
Battery: 12 Hour Back-up Option	
Backup Capacity	Lithium-ion 4.4 Ah
Battery Dimensions in. (cm)	1.2 x 1.85 x 5.7 (3.0 x 4.7 x 14.5)
Weight lbs (kg)	1.7 (0.77)
Battery Storage Temperature °F (°C)	-4 to 140 (-20 to 60) (Note 1)
Telemetry	AC Fail, Battery Low, Battery Missing, Replace Battery
Diagnostic LEDs	Power, DS, US, Online, Link, Telephone 1, Telephone 2, Battery

Interfaces

RF Interface	External F-connector
Data Interfaces (bridged)	10/100 Base-T Ethernet (RJ-45 connector), USB 1.1 Series B connector
Telephony Interface	2 lines; RJ-14 ("Line 1/2"), RJ-11 ("Line 2")
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)

ARRIS Technical Specifications

Specifications Continued

RF Downstream

Frequency Range (MHz)	88-1002
Modulation (QAM)	64 or 256
Data Rate (Mbps) (Max.)	30 or 42
RF Input Sensitivity Level (dBmV)	-15 to 15
Bandwidth (MHz)	6

RF Upstream

Frequency Range (MHz)	5-42
Modulation	QPSK, 8-QAM, 16-QAM, 32-QAM, 64-QAM & 128-QAM (S-CDMA only)
Data Rate (Mbps) (Max.)	up to 30.72
RF Output Level (dBmV)	A-TDMA: +8 to 54 dBmV (32-QAM, 64-QAM) +8 to 55dBmV (8-QAM, 16-QAM) +8 to 58 dBmV (QPSK) S-CDMA: +8 to +53 dBmV (all modulations)
Automatic Level Adjust	Yes
Gain Control Range (dB)	50
Frequency Stability (kHz)	±5
Output Impedance (Ohms)	75

Standards

CODEC: G.711, 64 kbps, μ and A-law encoded speech
Enhanced CODEC firmware support (G.726, G.728, G.729E)
T.38 Fax Relay
DOCSIS 2.0 based
PacketCable 1.0 & 1.5 based
RFC3261 SIP: Session Initiation Protocol
UL® 60950, FCC Part, WHQL and USB-IF

Notes:

1. Storage above 77°F (25°C) will significantly reduce life of the battery and is not recommended.
2. 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. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.

ARRIS Technical Specification

Ordering Information

Part Number	Description
721057	Touchstone TM602G/NA-0 DOCSIS 2.0 / PacketCable 1.0/1.5 Compliant E-MTA Integrated 100-240 Vac, 50/60 Hz Power supply with 6 foot power cord with NEMA 1-15 Includes Quick Install Guide, Ethernet Cable, USB Cable, and CD-ROM with Users Guide. NO battery included
721058	Touchstone TM602G/NA-4 DOCSIS 2.0 / PacketCable 1.0/1.5 Compliant E-MTA Includes 2-cell 2.2Ahr Li-Ion Battery Pack for up to 6 hours of battery back-up Integrated 100-240 Vac, 50/60 Hz Power supply w/ 6 foot power cord with NEMA 1-15 Includes Quick Install Guide, Ethernet Cable, USB Cable, and CD-ROM with Users Guide.
721059	Touchstone TM602G/NA-8 DOCSIS 2.0 / PacketCable 1.0/1.5 Compliant E-MTA Includes 2-cell 2.4Ahr, Li-Ion Battery Pack for up to 8 hours of battery back-up Integrated 100-240 Vac, 50/60 Hz Power supply w/ 6 foot power cord with NEMA 1-15 Includes Quick Install Guide, Ethernet Cable, USB Cable, and CD-ROM with Users Guide.
722011	Touchstone TM602G/NA-12 DOCSIS 2.0 / PacketCable 1.0/1.5 Compliant E-MTA Includes 4-cell 2.2Ahr, Li-Ion Battery Pack for up to 12 hours of battery back-up Integrated 100-240 Vac, 50/60 Hz Power supply w/ 6 foot power cord with NEMA 1-15 Includes Quick Install Guide, Ethernet Cable, USB Cable, and CD-ROM with Users Guide
721060	Touchstone TM602G/CE-0 DOCSIS 2.0 / PacketCable 1.0/1.5 Compliant E-MTA Integrated 100-240 Vac, 50/60 Hz Power supply w/ 6 foot power cord with CEE 7/16 "Euro" Power Plug Includes Quick Install Guide, Ethernet Cable, USB Cable, and CD-ROM with Users Guide. NO battery included
721061	Touchstone TM602G/CE-4 DOCSIS 2.0 / PacketCable 1.0/1.5 Compliant E-MTA Includes 2-cell 2.2Ahr, Li-Ion Battery Pack for up to 6 hours of battery back-up Integrated 100-240 Vac, 50/60 Hz Power supply w/ 6 foot power cord with CEE 7/16 "Euro" Power Plug Includes Quick Install Guide, Ethernet Cable, USB Cable, and CD-ROM with Users Guide
721062	Touchstone TM602G/CE-8 DOCSIS 2.0 / PacketCable 1.0/1.5 Compliant E-MTA Includes 2-cell 2.4Ahr, Li-Ion Battery Pack for up to 8 hours of battery back-up Integrated 100-240 Vac, 50/60 Hz Power supply w/ 6 foot power cord with CEE 7/16 "Euro" Power Plug Includes Quick Install Guide, Ethernet Cable, USB Cable, and CD-ROM with Users Guide
718003	Replacement 2-Cell, 2.2 Ah, Li-Ion Battery Pack for TM502G/H, TM602G/H, and TM504G/H
721944	Replacement 2-Cell, 2.4 Ah, Li-Ion Battery Pack for TM502G/H, TM602G/H, and TM504G/H
718005	Replacement 4-Cell, 4.4 Ah, Li-Ion Battery Pack for TM502G/H, TM602G/H, and TM504G/H
721192	8-Cell, 8.8 Ah, Li-Ion Battery Pack for TM602G/H and TM504G/H (Cannot be used in TM502G/H).Sold separately, no kitted TM602 option available

Specifications are subject to change without notice.

The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice. ARRIS, the ARRIS logo, Auspice®, C3™, C4®, C4c™, Cadant®, C-COR®, CHP Max®, ConvergeMedia™, Cornerstone®, CXM™, D5™, Digicon®, Flex Max®, Keystone™, MONARCH®, n5™, nABLE™, NSM™, nVision®, OpsLogic®, OpLogic Service Visibility Portal™, PLEXIS®, PowerSense™, Regal®, ServAssure™, Service Visibility Portal™, TeleWire Supply®, TLX®, Touchstone®, VoiceAssure™, VSM™, and WorkAssure™ are all trademarks of ARRIS Group, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. © Copyright 2009 ARRIS Group, Inc. All rights reserved. Reproduction in any manner whatsoever without the express written permission of ARRIS Group, Inc. is strictly forbidden. For more information, contact ARRIS.



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