

# Touchstone<sup>®</sup> TM601A Telephony Modem Technical Specification

### **Specifications**

Physical	
Operating Temperature °F (°C)	41 to 104 (5 to 40)
Operating Relative Humidity (MinMax.)	5-85% (Non condensing)
Storage Temperature °F (°C)	-40 to 158 (-40 to 70)
Color	Dark gray
Dimensions (W x H x D) in. (cm)	2.1 x 8.6 x 7.1, (5.3 x 21.8 x 18.0) - excluding F-connector
Weight lbs (kg)	1.20 (0.54)
Diagnostic LEDs	Power, DS, US, Online, Link, Telephone
Interfaces	
RF Interface	External 'F' type connector
Data Interfaces	10/100 Base-T Ethernet RJ-45
Telephony Interface	RJ-11 Input
Power (nominal)	100/240 VAC, 50/60 Hz
Telephony	
Supervisory Voltage	48 V dc nominal
Maximum Loop Length to CPE	500 ft (457M) of 26 AWG (0.4 mm) wire
Ringing Load Capacity	5 REN total
Provisionable High Loop Current Mode	No
Telcordia <sup>™</sup> GR 1089 (Lightning and Power Surge) Tested	No
Programmable Interface for Worldwide Applications	Yes (supports multiple country templates)
RF Downstream	
Frequency Range (MHz)	88 - 1002
Modulation (QAM)	64 or 256
Data Rate (Mbps) (Max.)	up to 42
RF Input Sensitivity Level (dBmV)	-15 to +15
Bandwidth (MHz)	6

## **Technical Specification**

### Specifications Continued...

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; T.38 Fax Relay; Enhanced codec software support planned (G.726, G.728, G.729) PacketCable 1.0 / 1.5 Based; DOCSIS 2.0 Based; RFC3261 SIP: Session Initiation Protocol; UL® 60950, IEC60950 (CB Scheme), IRAM, NOM; FCC Part 15 Class B, CE EMC; RoHS, WEEE

### **Touchstone® TM601A Ordering Information**

Part Number	Description
721048	Touchstone Telephony Modem TM601A/NA (Bulk Pack of 10 modems, DOCSIS 2.0, NCS based, Integrated Universal 100- 240V Power Supply, North American Power Cord Included)
721051	Touchstone Telephony Modem TM601A/NC (Bulk Pack of 10 modems, DOCSIS 2.0, NCS based, Integrated Universal 100- 240V Power Supply No Power Cords supplied – order separately)
722805	North American Power Cord, NEMA 1-15/C7 Plug
721197	European Power Cord, CEE7/16 Plug
721196	Argentine Power Cord, IRAM 2073/C7 Plug

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® (3<sup>m</sup>, C4<sup>®</sup>, C4c<sup>m</sup>, Cadant<sup>®</sup>, C-COR<sup>®</sup>, CHP Max<sup>®</sup>, ConvergeMedia<sup>m</sup>, Cornerstone<sup>®</sup>, CMM<sup>®</sup>, D5<sup>m</sup>, Digicon<sup>®</sup>, Flex Max<sup>®</sup>, Reystone<sup>™</sup>, MONARCH<sup>®</sup>, n5<sup>m</sup>, nABLE<sup>™</sup>, NSM<sup>™</sup>, Nision<sup>®</sup>, OpsLogic<sup>®</sup>, OpsLogic Service Visibility Portal<sup>™</sup>, PLEXIS<sup>®</sup>, PowerSense<sup>™</sup>, Regal<sup>®</sup>, Service Visibility Portal<sup>™</sup>, TeleWire Supply<sup>®</sup>, TLX<sup>®</sup>, Touchstone<sup>®</sup>, VoiceAssure<sup>™</sup>, VSM<sup>™</sup>, and WorkAssure<sup>™</sup> 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. <sup>®</sup> 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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