



Touchstone® DOCSIS® 3.0 Dual Band Concurrent Wireless Data Gateway with MoCA® DG1670A

Specifications

Physical

Operating Temperature °F (°C)	32 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.	9.5 x 7.25 x 2.3 - excluding F-connector
Weight lbs.	1.2
Diagnostic LEDs	Power, US/DS, Online, 2.4GHz, 5GHz, MoCA

Interfaces

RF Interface	External 'F' type connector
Data Interfaces (bridged)	4 x 10/100/1000 Base-T Ethernet (RJ-45 connector)
USB Interface	USB 2.0 Powered Host Port
MoCA	MoCA Version 1.1 coax support
Input Voltage (nominal)	100VAC-240VAC, 50/60 Hz

RF Downstream

Bonded Channels	Up to 16
Tuner Configuration	Full capture tuning range
Frequency Range (MHz)	108-1002 DOCSIS
Carrier Bandwidth (MHz)	6 (DOCSIS)
Modulation (QAM)	64 or 256
Data Rate (Mbps Max.)	Up to 640 DOCSIS (960 with 24 downstream license)
RF Input Sensitivity Level (dBmV)	-15 to +15 (DOCSIS)

Continue to next page.

ARRIS 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 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 (from any antenna)	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.
Spatial Streams	3
Receive Levels (all bands)	2.4GHz - <-86dBm 802.11n (MCS0) , <-74dBm 802.11n (MCS7) 5.0GHz - <-84dBm 802.11n (MCS0) , <-72dBm 802.11n (MCS7)
Antennas	3 transmit, and 3 receive (per band)

MoCA

Frequency Range (MHz)	1150 – 1500
Network Channel Bandwidth (MHz)	50
Max Transmit Power (dBm)	+ 9 max (adjustable)
Max Phy Rate (Mbps)	270
Application Data Rate (Mbps)	175 bidirectional combined
Link Delay	9ms max

Standards

DOCSIS® 3.0	IEEE 802.3, IEEE 802.3ab, IEEE 802.3x
MoCA 1.1	IEEE 802.1p, IEEE 802.1Q
UL® 60950	IEEE Std. 802.11b, 1999 Edition
WiFi Alliance Certified	IEEE Std. 802.11g, 2002 Edition
FCC Part 15 Class B	IEEE Std. 802.11n

Ordering Information

Part Number	Description
DOCSIS 3.0 Models	Touchstone; DG1670A/NA Wireless Modem DOCSIS 3.0 16x4, Dual Band Concurrent 3x3:3 802.11n radios, 4 Gigabit Ethernet, MoCA1.1, 115-240VAC, 50/60 Hz
800938	Touchstone DG1670A/NA with NEMA 1-15 Power Cord
782204	8 Downstream license upgrade
Accessories	Please contact ARRIS for Specific Ordering Information and Options Power Cords, Wall Mounting Brackets

Specifications are subject to change without notice.

©ARRIS Enterprises, Inc. 2013 All rights reserved. No part of this publication may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from ARRIS Enterprises, Inc. ("ARRIS"). ARRIS reserves the right to revise this publication and to make changes in content from time to time without obligation on the part of ARRIS to provide notification of such revision or change. ARRIS and the ARRIS logo are all trademarks of ARRIS Enterprises, 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. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.



www.arrisi.com