

# Touchstone® DOCSIS® 3.0 Dual Band Concurrent Wireless Telephony Gateway with MoCA® TG1672G

| 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.   | 10.8 x 8.2 x 2.3 - excluding F-connector  |  |
| Backup Capacity  | 4 cell 2.2AH Lithium-ion for 8 hours operation. (#718005 Battery Pack)  |  |
| Battery Dimensions in.   | 1.2 x 1.95 x 5.5  |  |
| Weight lbs   | 2.5 (With Battery included)   |  |
| 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, US/DS, Online, 2.4GHz, 5GHz, Tel1, Tel2, Battery, MoCA   |  |
| Interfaces   |   |  |
| RF Interface   | External 'F' type connector   |  |
| Data Interfaces (bridged)  | 4 x 10/100/1000 Base-T Ethernet (RJ-45 connector)   |  |
| Analog Telephony Interface   | 2 lines; RJ-14 ( "Line 1/2"), RJ-11 ( "Line 2" )  |  |
| USB Interface  | USB 2.0 Powered Host Port   |  |
| MoCA   | MoCA Version 1.1 coax support   |  |
| Input Voltage (nominal)  | 115VAC-240VAC, 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   | Vac (40mA constant current course)  |  |
| Provisionable High Loop Current Mode<br>Programmable Interface for Worldwide | Yes (40mA constant current source)<br>Yes (supports multiple country templates)   |  |
| Applications   |   |  |
| 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  |  |
| RF Input Sensitivity Level (dBmV)  | -15 to +15 (DOCSIS))  |  |
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# **Technical Specification**

## **ARRIS Technical Specification**

#### **Specifications Continued**

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|---|--|--|
| 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 dBm<br>61 dBmV (QPSK)<br>S-CDMA: +8 to +56 dB  | V (32 QAM, 64 QAM) +8 to 58dBmV (8 QAM, 16 QAM) +8 to mV (all modulations)   |
| Automatic Level Adjust  | Yes  |  |
| Output Impedance (Ohms)   | 75   |  |
| Wireless  |  |  |
| Frequency Range   | Simultaneous 2.5GHz and 5GHZ operation   |  |
| Transmit Power (from any antenna)   | 5.0GHz – 26.3 dBm +2/<br>Includes MiMo additive  | -2 dBm 802.11n MCS0 ; 24.3dBm +2/-2dBm 802.11n (MCS7).<br>-2 dBm 802.11n MCS0 ; 26.3 dBm +2/-2dBm 802.11n (MCS7).<br>-2 power gains . Total system power is adaptable to maintain<br>specific band of operation where necessary. |
| Spatial Streams   | 3  |  |
| Receive Levels  | 2.4GHz - <-86dBM 802.11n (MCS0) , <-74dBm 802.11n (MCS7)<br>5.0GHz - <-84dBM 802.11n (MCS0) , <-72dBm 802.11n (MCS7) |  |
| Antennas  | 3 transmit, and 3 receiv   | ve (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<br>PacketCable™ 1.0 & 1.5<br>Codecs: G.711, 64 kbps, μ and A-law encoded speech,<br>Enhanced G.722 HD codec<br>T.38 Fax Relay<br>MoCA 1.1<br>UL® 60950 |  | IEEE 802.3, IEEE 802.3ab, IEEE 802.3x<br>IEEE 802.1p, IEEE 802.1Q<br>IEEE Std. 802.11b, 1999 Edition<br>IEEE Std. 802.11g, 2002 Edition<br>IEEE Std. 802.11n<br>Wi-Fi® Alliance Certified<br>FCC Part 15 Class B                 |

Note: 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<br>Models | Touchstone; TG1672G Wireless eMTA DOCSIS 3.0 16x4, Dual Band Concurrent 3x3:3 802.11n radios,<br>4 Gigabit Ethernet, MoCA 1.1, 115-240VAC, 50/60 Hz, North America Power Cord, Ethernet Cable |
| 800947               | Touchstone TG1672G/NA-0, battery capable, no battery included   |
| 800937               | Touchstone TG1672G/NA-8 , 4 cell (#718005) 2.2AH Li-Ion Battery Pack for up to 8 hours of battery back-up   |
| Accessories          | Please contact ARRIS for Specific Ordering Information and Options  |
|                      | Battery Packs, Power Cords, Wall Mounting Brackets  |

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