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

## Specifications

### Physical

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature °F (°C)</td>
<td>32 to 104 (0 to 40)</td>
</tr>
<tr>
<td>Operating Relative Humidity (Min-Max)</td>
<td>5-85% (Non condensing)</td>
</tr>
<tr>
<td>Storage Temperature °F (°C)</td>
<td>-40 to 158 (-40 to 70)</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Dimensions (H x W x D) in.</td>
<td>10.8 x 8.2 x 2.3 - excluding F-connector</td>
</tr>
<tr>
<td>Backup Capacity</td>
<td>4 cell 2.2AH Lithium-ion for 8 hours operation. (#718005 Battery Pack)</td>
</tr>
<tr>
<td>Battery Dimensions in.</td>
<td>1.2 x 1.95 x 5.5</td>
</tr>
<tr>
<td>Weight lbs</td>
<td>2.5 (With Battery included)</td>
</tr>
<tr>
<td>Battery Storage Temperature °F (°C)</td>
<td>-4 to 140 (-20 to 60) Note: Storage above 77°F (25°C) will significantly reduce life of the battery and is not recommended.</td>
</tr>
</tbody>
</table>

### 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 Programmable Interface for Worldwide Applications**: Yes (40mA constant current source) Yes (supports multiple country templates)

### 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 upgrade)
- **RF Input Sensitivity Level (dBmV)**: -15 to +15 (DOCSIS)
### 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 58 dBmV (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**:
  - 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**
- **PacketCable™ 1.0 & 1.5**
- **Codescs**: G.711, 64 kbps, µ and A-law encoded speech, Enhanced G.722 HD codec
- **T.38 Fax Relay**
- **MoCA 1.1**
- **UL® 60950**

### Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>800947</td>
<td>Touchstone; TG1672G Wireless eMTA DOCSIS 3.0 16x4, Dual Band Concurrent 3x3:3 802.11n radios, 4 Gigabit Ethernet, MoCA 1.1, 115-240VAC, 50/60 Hz, North America Power Cord, Ethernet Cable</td>
</tr>
<tr>
<td>800937</td>
<td>Touchstone TG1672G/NA-8, 4 cell (#718005) 2.2AH Li-Ion Battery Pack for up to 8 hours of battery back-up</td>
</tr>
<tr>
<td>782204</td>
<td>8 downstream license upgrade</td>
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</tbody>
</table>

### Accessories

- **Battery Packs, Power Cords, Wall Mounting Brackets**

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