Touchstone® DG3450 Cable Gateway

DOCSIS® 3.1 Cable Gateway with 802.11ac Wi-Fi & MoCA® 2.0

FEATURES

• 2x2 OFDM and OFDMA DOCSIS® 3.1 channels
• 32x8 SCQAM DOCSIS® 3.0 channels
• Full Capture Bandwidth Tuner
• Multi Processor Technology with ARM and ATOM based Application Processor
• 4 port Gigabit Ethernet Router
• Switchable upstream filters for 42MHz or 85MHz operation.
• 4x4 Integrated Dual Band Concurrent 5GHz 802.11ac Wave2 radios
  and 3x3 2.4GHz 802.11n for high performance WLAN
• MoCA 2.0 (with channel bonding) for in Home Video and Data distribution over Coax
• Multiple SSID support with DFS channels and Dynamic Channel change
• Single PCB design
• Multiple operator controlled configuration options
• Designed for enhanced application support

PRODUCT OVERVIEW

The DG3450 Wireless Gateway supporting DOCSIS 3.1 allows unprecedented data rates to be delivered to MSO customers. The DG3450, along with its 4x4 802.11ac Dual Band Wireless radios, offers superior Wi-Fi performance enabling video over Wi-Fi. The MoCA 2.0 interface with channel bonding enables the creation of a high performance home network. The switchable US diplex filter is designed to produce superior RF performance and ease of deployment on a DOCSIS 3.1 network.
Increased DRAM, Flash and Multiple embedded processor cores are designed to allow new applications to be deployed on the gateway. This feature-packed unit is intended to serve as the hub of the subscriber's network, connecting all IP capable devices (Internet, Data and Video) throughout the customer's premises.

Residential gateway support has always been a concern of the operator. The DG3450 distinguishes itself with capabilities to minimize these support needs. Multiple provisioning methods (SNMP, Configuration File, Remote WebGUI access, TFTP, and TR-069/181) allow custom designed setups to be applied to monitor the end user more efficiently. Multiple remote access levels (User, Cusadmin, and MSO) also allow more ease and flexibility for manual configuration and control.

The DG3450 will help lead the future to advanced home and small business services.

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<th>Interfaces</th>
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<tr>
<td>Operating Temperature</td>
<td>0 to 40°C</td>
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<tr>
<td>Operating Relative Humidity</td>
<td>5-85% (Non condensing)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40 to 70°C</td>
</tr>
<tr>
<td>Dimensions (H x W x D)</td>
<td>9.33in x 2.87in x 8in 237mm x 73mm x 205mm</td>
</tr>
<tr>
<td>Backup Capacity (not supplied)</td>
<td>External BBU</td>
</tr>
<tr>
<td>Weight</td>
<td>1.94lbs 0.88kg</td>
</tr>
<tr>
<td>Diagnostic LED’s (Top)</td>
<td>Integrated LED for status of Power, US/DS, Online, 2.4GHz, 5GHz, Battery, MoCA</td>
</tr>
<tr>
<td>Diagnostic LED’s (Rear)</td>
<td>MoCA, Ethernet Link/Speed</td>
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<tr>
<th>Interfaces</th>
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<tr>
<td>RF Interface</td>
<td>1 External ‘F’ type connector</td>
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<tr>
<td>Date Interfaces (bridged)</td>
<td>4 x 10/100/1000 Base-T Ethernet (RJ-45 connector)</td>
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<td>MoCA</td>
<td>MoCA 2.0</td>
</tr>
<tr>
<td>Input Voltage (nominal)</td>
<td>12V DC</td>
</tr>
<tr>
<td>AC-DC</td>
<td>External</td>
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### SPECIFICATIONS

#### RF Downstream
- **Bonded Channels**: Up to 32 SCQAM or 2 OFDM
- **Tuner Configuration**: Full capture tuning range
- **Frequency Range (MHz)**: 108MHz - 1002MHz DOCSIS
- **Data Rate (Mbps Max.)**: Up to 5Gbps
- **RF Input Sensitivity Level**: -15dBmV to +15dBmV (DOCSIS)

#### RF Upstream
- **Bonded Channels**: Up to 8 SCQAM or 2 OFDMA
- **Frequency Range**: 5MHz to 85MHz
- **Configurable Diplex Filter**: 42MHz-85MHz
- **Data Rate (Mbps Max.)**: Up to 1Gbps
- **RF Output Level**: +65 dBmV (64 QAM, single upstream) +57 dBmV (64 QAM, 4-8 upstreams) +65 dBmV (16 QAM, single upstream)

### SPECIFICATIONS

#### Wireless
- **Frequency Range**: 2.4GHz and 5GHz
- **Transmit Power (from any antenna)**:
  - +29dBm (MCS7, 2.4GHz)
  - +28 dBm (MCS7, 5GHz, HT20)
  - +26 dBm (MCS9, 5GHz, VHT40)
- **Spatial Streams**: 3 for 2.4GHz, 4 for 5GHz
- **Receive Levels**: 2.4GHz: <-88dBM 802.11n (MCS0), <-71dBm 802.11n (MCS7), HT20 5.0GHz: <-89dBm 802.11ac (MCS0), <-60dBm 802.11ac (MCS9), VHT80
- **Antennas**: 7 transmit, and 7 receive (total)

#### MoCA
- **Frequency Range**: 1150MHz –1500MHz
- **Network Channel Bandwidth**: 50MHz
- **Max Transmit Power**: + 9 dBm max (adjustable)
- **Max PhyRate**: 1400 Mbps
- **Application Data Rate**: 800 Mbps bidirectional combined

### CUSTOMER CARE

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656