The Touchstone® DOCSIS® 3.0 32x8 Embedded Multimedia Terminal Adaptor (E-MTA) TM3202 delivers two lines of primary line Voice over IP (VoIP), up to 1 Gigabit per second high speed data access, and multiple battery pack options to support telephony service during power outages. Designed as a customizable solution for advanced users, the TM3202 enables both home and small businesses the speed and performance achievable with 16x4, 24x8, or 32x8 bonded channels, along with industry-leading ARRIS voice and battery back-up features. With the TM3202, cable operators can maintain competitive position against VDSL and fiber to the home services by offering subscriber data services as high as 1 Gbps.

PRODUCT OVERVIEW:

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### GENERAL SPECIFICATIONS

#### Physical
- **Operating Temperature °F (°C)**: 32 to 104 (0 to 40)
- **Operating Relative Humidity (Min-Max)**: 5-95% (non-condensing)
- **Storage Temperature °F (°C)**: -40 to 158 (-40 to 70)
- **Dimensions (H x W x D) in. (cm)**: (excluding F-connector)
  - TM3202A: 7.1x1.8x7.1 (18.1x4.6x18.0)
  - TM3202G: 9.1x2.2x7.0 (23.1x5.5x17.9)
  - TM3202G w/ 8-cell: 9.7x2.2x7.0 (24.7x5.5x17.9)
- **Unit Weight in lbs (kg)**: (TM3202A) 1.11 (0.50)
  - (TM3202G) 1.39 (0.63) – not including battery
- **Battery Pack Weights in lbs (kg)**: 4-Hr Pack: Li-ion 2.2 AH Capacity, 0.25 (0.11)
  - 8-Hr Pack: Li-ion 4.4 AH Capacity, 0.50 (0.22)
  - 12-Hr Pack: Li-ion 6.6 AH Capacity, 0.75 (0.33)
  - 16-Hr Pack: Li-ion 8.8 AH Capacity, 1.0 (0.44)
- **Battery Storage Temperature °F (°C)**: -4 to 140 (-20 to 60)
- **Battery Telemetry (TM3202G only)**: AC Fail, Battery Low, Battery Missing, Replace Battery
- **Input Voltage (nominal)**: 115 VAC, 60 Hz
- **Telephone**
  - **Supervisory Voltage**: 48 VDC nominal
  - **Maximum Loop Length to CPE**: 1500 ft (457M) of 26 AWG (0.4 mm) wire
  - **Ringing Load Capacity**: 10 REN total, 5 per line
  - ** Provisional High Loop Current Mode**: Yes (40mA constant current source)
  - **Telcordia™ GR 1089 Tested**: Yes
  - **Programmable Country Interface**: Yes (support for multiple country templates)

#### Interfaces
- **RF Interface**: External 75 ohm ‘F’ type connector
- **Data Interface**: 10/100/1000 Base-T Ethernet RJ-45
- **Telephony Interface**: Two (2) RJ-11 jacks
- **Battery Interface**: Custom male connector, rectangular, 2mm
- **Input Voltage (nominal)**: 115 VAC, 60 Hz

#### RF Downstream
- **Frequency Range (MHz)**: 108-1002 (edge-to-edge)
- **Bonded Channels**: Up to 32
- **Tuner Configuration**: Full capture tuning range
- **Modulation (QAM)**: 64 or 256
- **Data Rate (Mbps, Theoretical)**: Up to 1000 (limited by GigE interface)
- **RF Input Sensitivity Level (dBmV)**: -15 to +15
- **Carrier Bandwidth**: 6 MHz
- **MoCA® Immunity Filter**: Yes

#### RF Upstream
- **Frequency Range (MHz)**: 5-42 (A/NA, G/NA) or 5-85 (A/NA-85 versions)
- **Bonded Channels**: Up to 8
- **Modulation**: QPSK, 8QAM, 16QAM, 32QAM, 64QAM, 128QAM (S-COMA only)
- **Modulation Bandwidth (KHz)**: TDMA: 200, 400, 800, 1600, 3200, 6400
  - S-COMA: 1600, 3200, 6400
- **Data Rate (Mbps, Theoretical)**: up to 240

### RF Upstream (continued)

- **Automatic Level Adjust**: Yes
- **Frequency Stability (KHz)**: ±15
- **Output Impedance (Ohms)**: 75

### Standards
- **DOCSIS 3.0 Certified**
- **UL® 60950 / CB RoHS / WEEE**
- **FCC Part 15 Class B / ICES-003**
- **FCC Part 15 Class B / ICES-003**
- **ITU-T K.21**
- **RFC3261 Legacy SIP**
- **Telcordia™ GR-1089**
- **Telcordia™ GR-63 NEBS**
- **RFC3261 Legacy SIP**
- **ITU-T K.21**

### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000032</td>
<td>TM3202A/NA, DOCSIS 3.0 E-MTA, Ships in 32x8 Configuration, 2-Lines VoIP, Not Battery Capable, 115VAC 60HZ, NA Power Cord, 1x GigE, No USB, RoHS, Quick Start Guide, and Ethernet cable.</td>
</tr>
<tr>
<td>1000110</td>
<td>TM3202A/NA-85, DOCSIS 3.0 E-MTA, Ships in 32x8 Configuration, 5-85 MHz Upstream, 2-Lines VoIP, Not Battery Capable, 115VAC 60HZ, NA Power Cord, 1x GigE, No USB, RoHS, Quick Start Guide, and Ethernet cable.</td>
</tr>
<tr>
<td>1000035</td>
<td>TM3202G/NA-0, DOCSIS 3.0 E-MTA, Ships in 32x8 Configuration, 2-Lines VoIP, Battery Capable (no battery included), 115VAC 60HZ, NA Power Cord, 1x GigE, No USB, RoHS, Quick Start Guide, and Ethernet cable.</td>
</tr>
<tr>
<td>1000036</td>
<td>TM3202G/NA-8, DOCSIS 3.0 E-MTA, Ships in 32x8 Configuration, 2-Lines VoIP, Battery Capable (ships w/ one 4-cell Li-Ion pack for up to 5 hours of standby power), 115VAC 60HZ, NA Power Cord, 1x GigE, No USB, RoHS, Quick Start Guide, and Ethernet cable.</td>
</tr>
<tr>
<td>1000037</td>
<td>TM3202G/NA-16, DOCSIS 3.0 E-MTA, Ships in 32x8 Configuration, 2-Lines VoIP, Battery Capable (ships w/ one 8-cell Li-Ion pack for up to 16 hours of standby power), 115VAC 60HZ, NA Power Cord, 1x GigE, No USB, RoHS, Quick Start Guide, and Ethernet cable.</td>
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