The QT Series is the latest Blonder Tongue Transcoder product and it features the ultimate combination of optimum balance of price per channel and top notch performance and functionality. This new unit incorporates a scalable modular design that allows from one to eight transcoder module sections as well as a single combination power supply & control module to be added, removed or swapped at any time. Support for redundant back-up or ‘standby’ power has been built into every QT power supply & control module. This ability is easily added by an operator at any time by interfacing an optional standby power supply unit. The QT Series also has the ability to easily accommodate advances such as 8PSK decoding and 256 QAM processing via a specially designed optional QAM Transcoder Module (QTM-HD).

Each QT Chassis can contain up to eight (8) separate QPSK to QAM transcoder modules. Each QAM Transcoder Module (QTM) is fully agile to allow the reception of any Echostar Dish Network™ or Bell ExpressVu DVB based QPSK transponder signal, (ITU-T J.83 Annex A). The module is housed in a specially designed chassis intended to accommodate the transcoder modules. Control of the modules is easily accomplished with a common power supply & control unit via operator selection from the front panel push button controls and back-lit LCD panel. This module interfaces to any of the QAM transcoder modules through a simple 12-pin connector and cable. The control module’s brain is a flash upgradeable microprocessor to ensure support for any future development.
QAM Transcoder
QT Series

Specifications

Satellite 8PSK Input
- Input Frequency Range: Agile 950-2150 MHz
- 8PSK Bandwidth: up to 36 MHz
- Frequency Step: 1 MHz
- Capture Range: ±5 MHz
- Input Level Range: -65 to -20 dBm
- RF Input Impedance: 75 Ω
- Return loss: 8 dB min.
- FEC Decoding: DVB
- Symbol Rate: 2 to 45 Mpsps
- Code Rate: Viterbi Auto Recognition
- I - Q Format: Normal / Inverted

QAM Output
- Output Frequency Range: Agile 54-860 MHz (CATV 2-135)
- QAM Bandwidth: 6 MHz
- Frequency Step: 6 MHz
- Output Level: +40 dBmV *
- Display Error: ±2 dB
- Level Adjustment Range: 15 dB
- Modulation Mode: 16, 32, 64, 128, 256 QAM (8PSK & 256 QAM Capable with optional QTM-HD)
- Symbol Rate: 1 Msp to 6.9 Msp
- Spectral Inversion: Auto Recognition
- Carrier Suppression: 45 dB
- Roll Off: 12, 15, 18 %
- QAM SNR: >40 dB
- MER: 38 to 41 dB
- RF Output Impedance: 75 Ω
- Spurious: -60 dBc
- Broadband Noise: -75 dBc min.
- (4 MHz BW @40 dBmV)
- Phase Noise @ 10 kHz: -90 dBc
- Frequency Stability: ± 10 kHz
- QAM I/Q Phase Error: < 1 degree
- I/Q Amplitude Imbalance: < 1 dB
- Controls and Indicators
- PCM
- Computer Control: 2 RJ11 Rear Panel RS232

Connectors
- Backlit Liquid Crystal Display (LCD)
- 5 Navigation/Enter Push Buttons
- QTM Unit Status Indicator: 1 Green LED Per Module

Mechanical
- Chassis Dimensions: 5.25 x 19.0 x 12 inches
- QTM Dimensions: 5.25 x 10.625 x 1.5 inches
- Mounting: Standard EIA Unit Height
- QTM Unit Weight: 1.7 lbs
- QTM-8 Weight: 28 lbs

Power
- Requirement: 100 to 265 VAC, 1A
- Frequency: 50 to 60 Hz
- Power Consumption:
  1 QTM & PCM: 15 W
  2 QTM & PCM: 25 W
  3 QTM & PCM: 35 W
  4 QTM & PCM: 45 W
  5 QTM & PCM: 56 W
  6 QTM & PCM: 66 W
  7 QTM & PCM: 76 W
  8 QTM & PCM: 87 W
- Fuse: 4 Amp, 250 VDC, SB

Environmental
- Operating Temperature: 0 to 50 °C
- Storage Temperature: -20 to 70 °C
- Humidity: 0 to 90 % RH

Ordering Information

QAM Transcoder

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>QTM</td>
<td>6231</td>
<td>QAM Transcoder Module</td>
</tr>
<tr>
<td>QTM-HD</td>
<td>6241</td>
<td>QAM Transcoder Module, High Definition</td>
</tr>
<tr>
<td>QTM-HD PLUS</td>
<td>6242</td>
<td>QAM, Transcoder Module, High Definition Plus</td>
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<tr>
<td>QTPCM</td>
<td>6232</td>
<td>QAM Power Supply &amp; Control Module</td>
</tr>
<tr>
<td>QTRC</td>
<td>6233</td>
<td>QAM Transcoder Rack Chassis</td>
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<tr>
<td>QTRA-8</td>
<td>6230</td>
<td>QAM Transcoder Rack Assembly (contains 8 QTM and a QTPCM in a QTRC)</td>
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<tr>
<td>QTRA-8 &amp; RFCS</td>
<td>6229</td>
<td>QAM Transcoder Rack Assembly (Contains 8 QTM and a QTPCM in a QTRC with a QTRFCS)</td>
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</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Model</th>
<th>Stock No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>QTRFC</td>
<td>6234</td>
<td>QT RF Combiner and Splitter (Contains QTRFC, 6234-1 and QTRFS, 6234-2)</td>
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<tr>
<td>QTHF</td>
<td>6235</td>
<td>QT Headend Fan</td>
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<tr>
<td>QTPB</td>
<td>6236</td>
<td>QT Blank Panel</td>
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<tr>
<td>QTSPS</td>
<td>6239</td>
<td>QT Standby Power Supply with Headend Fan</td>
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<tr>
<td>HDA-16-860-16</td>
<td>6240-16</td>
<td>Headend Distribution Amplifier (with 16 dB Gain, 16 Ports)</td>
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<tr>
<td>HDA-8-860-20</td>
<td>6240-08</td>
<td>Headend Distribution Amplifier (with 20 dB Gain, 8 Ports)</td>
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<tr>
<td>QC-HSK</td>
<td>2720</td>
<td>QCentral Remote Monitoring and Control Software</td>
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<tr>
<td>QTHF</td>
<td>6235</td>
<td>Headend Fan</td>
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<tr>
<td>HWS</td>
<td>2727</td>
<td>Headend Web Server</td>
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</tbody>
</table>

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