

AQT8-QAM/IP

**ATSC/QAM TRANSCODER,
8X8 VSB/QAM TO QAM/IP**



AQT8-QAM/IP transcoder allows the user to build a custom channel lineup via IP output by selecting input programs from 8VSB (Digital off-air) or QAM (Clear digital cable) formats. The unit provides a combination of SPTS and/or MPTS IP output across eight (8) IP addresses. The AQT8 maps QAM/8VSB input programs directly to QAM output channels. The AQT8-QAM/IP features Emergency Alert System (EAS) program switching through either an ASI or IP format EAS input and terminal block contacts for triggering.

Comprehensive remote monitoring and control is accomplished using any standard Web browser via a rear-panel 10/100BaseT Ethernet connection.



Features

- Accepts up to eight 8VSB or QAM channel inputs
- Provides a combination of eight SPTS or MPTS via one GigE RJ45 port
- Maps QAM/8VSB input programs directly to QAM output channels
- Provides comprehensive GUI-based monitoring and control via standard Web browsers
- Supports Closed Captioning EIA-608 and EIA-708 when embedded in RF input(s)
- Accepts EAS input in ASI or IP formats (IP delivered services only)
- Provides in-service monitoring of selected input/output ports via RF Test connector and ASI output

Ordering Information

Model	Stock #	Description
AQT8-QAM/IP	6281	ATSC/QAM Transcoder; 8xATSC/QAM inputs; IP + QAM outputs

Specifications

Input

Connectors	
8VSB/QAM:	"F" Female
8VSB Mode	Standard: ATSC Digital Television A/53E Tuning Range: UHF (Ch. 14-69), VHF (Ch. 2-13) Data Rate: 19.392 Mbps Bandwidth: 6 MHz Power Level: -20 to +20 dBmV Impedance: 75 Ω
QAM Mode	Standard: ITU-T J.83 - Annex A & B (64 and 256 QAM) Tuning Range: CATV Ch. 2-135 (STD, HRC, IRC) Data Rate: 38.8 Mbps (QAM 256); 26.97 Mbps (QAM 64) – Auto Detect Bandwidth: 6 MHz Power Level: -15 to 20 dBmV (@ QAM 256) -20 to 20 dBmV (@ QAM 64) Impedance: 75 Ω
Emergency Alert System ASI	Connector: 1x BNC Female Standard: DVB-ASI; EN 50083-9 (SPTS)
IP	Connector: 1x RJ45 Standard: 10/100Base-T UDP/RTP: Supported (user-selectable) Transport Rate: Single program at 3 Mbps. Higher data rates can be used with a lower number of output programs as to not exceed the maximum allowable bit rate on the QAM output channel.
Trigger	Connectors: Terminal Block Trigger Mechanism: 5-12 VDC & Dry Contact Closure

Output

IP:	Connectors: 1x RJ45 (Rear-panel) Standard: 1000Base-T Ethernet (GigE) UDP/RTP: Supported (user-selectable) Address Assignment: 8x IPv4 addresses & port numbers (user-selectable)
QAM	No. of Output Modules: 2 Quad-QAM Connector: 1x "F" Female (rear-panel; for combined outputs) Modulation: QAM 16, 32, 64, 128, and 256 Standards: ITU-T J.83; Annex A and B DVB Symbol Rate: Variable; up to 7 MSymbol/sec (MBaud) Frequency Range: 54 to 996 MHz Tuning: CATV Channel Selectable (Ch. 2 to 158) Channels' Bandwidth: 2x 24 MHz (4x Adjacent 6MHz) No. of Programs: Variable (not to exceed 38.8 Mbps) RF Level: +40 dBmV, ± 1 dB increment RF Level Adjustment Range: +35 to +42 dBmV, 1 dB increment Frequency Tolerance: ± 0.5 kHz @ 77 °F (25 °C) Frequency Stability: ± 5 kHz over 32 to 122 °F (0 to 50 °C) Amplitude Flatness: ± 0.25 dB (over 6 MHz channel) Phase Noise: -98 dBc (@ 10 kHz) Spurious: -60 dBc Broadband Noise: -70 dBc (@ +35 dBmV output level, 5.5 MHz bandwidth) Impedance: 75 Ω Spectral Inversion: Auto Recognition Carrier Suppression: 45 dB Return Loss: 14 dB typical Signal-to-Noise Ratio (SNR): 40 dB typical MER: 39 dB typical I/Q Phase Error: Less than 1 degree I/Q Amplitude Imbalance: Less than 1%
ASI	Connector: 1x BNC Female Standard: DVB-ASI; EN 50083-9

General

Dimensions (W x D x H):	19.0 x 16.0 x 1.75 inches (483 x 363 x 44 mm)
Power:	110 /230 VAC 60/50 Hz
Power Dissipation:	70 W
Weight:	12 lbs (5.5 kg)
Operating Temperature:	32 to 122 °F (0 to 50 °C)
Storage Temperature:	-13 to 158 °F (-25 to 70 °C)
Operating Humidity:	0 to 95% RH @ 35 °C max, non-condensation
Storage Humidity:	0 to 95% RH @ 35 °C max, non-condensation

Alarms/Monitoring/Control

Local Monitoring:	8 Channel LEDs 1x Power LED
Local Control:	1x IP Reset Button
Remote Monitoring/Control:	GUI-based menu via standard Web browser (1x RJ45 rear panel connector; 10/100Base-T)

Related Products

Model	Description
AQT8-IP	ATSC/QAM Transcoder, 8 Inputs; IP Outputs
AQT8-QAM	ATSC/QAM Transcoder, 8 Inputs; QAM Output
AQT	ATSC/QAM Transcoder, Modular

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