



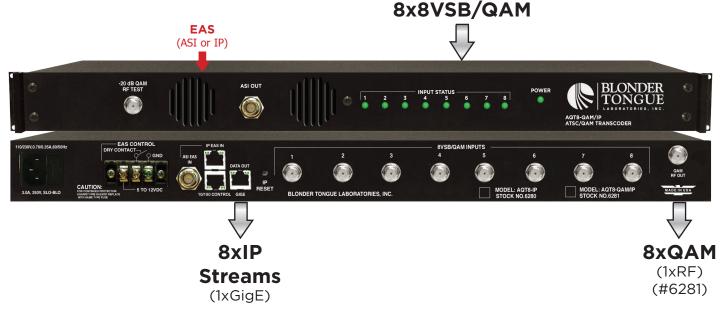
AQT8 Series

ATSC/QAM Transcoder 8x8 VSB / QAM to QAM / IP

AQT8 Series 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 Series 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

ModelStock #DescriptionAQT8-QAM/IP6281ATSC/QAM Transcoder; 8xATSC/QAM inputs; IP + QAM outputs





AQT8 Series

ATSC/QAM Transcoder 8x8 VSB / QAM to QAM / IP

Specifications

Input

Connectors	
8VSB/QAM:	"F" Female
8VSB Mode Standard: Tuning Range: Data Rate: Bandwidth: Power Level: Impedance:	19.392 Mbps 6 MHz -20 to +20 dBmV
QAM Mode Standard: Tuning Range: Data Rate: Bandwidth: Power Level: Impedance:	CATV Ch. 2-135 (STD, HRC, IRC) 38.8 Mbps (QAM 256); 26.97 Mbps (QAM 64) – Auto Detect 6 MHz -15 to 20 dBmV (@ QAM 256) -20 to 20 dBmV (@ QAM 64)
Emergency Alert System	
Connector: Standard:	1x BNC Female DVB-ASI; EN 50083-9 (spts)
Connector: Standard: UDP/RTP:	IX IB IS
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: Trigger Mechanism:	Terminal Block 5-12 VDC & Dry Contact Closure

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

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 (Stock No. 6281)	
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, \pm 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:	\pm 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
Stalluaru:	UND-ASI, LN 30003-3

Alarms/Monitoring/Control

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

Specifications Subject To Change Without Notice

Rev 03-14

© Toner Cable Equipment, Inc.