



**Blonder
Tongue**

EQAM-420B
Campus Video Emergency Management

SOLUTIONS FOR ALL YOUR APPLICATIONS

The **EQAM-420B** is designed to allow operators to aggregate multiple SDTV/HDTV programs received in IP format and deliver them over a standard coaxial distribution network. The **EQAM-420B** supports network-based Emergency Alert System (EAS) program switching based on the SCTE-18 standard.

The unit is capable of accepting unencrypted (clear) IP streams in one of the following two (2) modes:

SPTS Mode: Accepts and processes up to sixty four (64) MPEG-2/H.264 SPTS for delivering up to 16x clear or Pro:Idiom™ encrypted QAM outputs.



[1] 12 or 16 MPTS depending on the result of engineering study

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16xQAM (Clear/Pro:Idiom™)

Features

- **SPTS Mode:** Accepts up to sixty four MPEG-2/H.264 Single Program Transport Streams (SPTS); 1 video + 1 audio per program
- **MPTS Mode:** Accepts up to sixteen MPEG-2/H.264 Multi Program Transport Streams (MPTS); each MPTS with max of six programs (not to exceed 38.8 Mbps) 1 video + 3 audios per program
- Supports IGMPv2 and IGMPv3 protocols
- MPEG Table Preservation ensures proper program information is undisturbed
- PMT & PID values are passed through without change (no MPEG table re-mapping)
- SNMPv2 management interface
- System configurable to support Federal (FEMA-IPAWS) warnings, State, Tribal, Local, and Private groups
- Use any standard web-browser on PC's, Mac's, and Smart phones to view change or activate functions - anywhere, over an IP network.
- Single wire, network interface simplifies installation, setup, and assures proper operation

Ordering Information

Model	Stock #	Description
EQAM-420B-4-64	6522B-4-64	Equipped w/4 Quad-QAM output modules (accepts 64 clear HD programs)
EQAM-420B-PIL	6522B-PIL	Software option to add Pro:Idiom™ encryption

Made in U.S.A.

Rev: 051217
Blonder Tongue is ISO 9001:2015 Certified

Specifications

Input

IP	Connector: 2x RJ-45 Standard: 1000Base-T Ethernet UDP/RTP: Supported (user-selectable) Protocols Supported: IGMPv3; IGMPv2
Stream Portfolio	SPTS & MPTS: Null Packet Deletion & Addition Muxing of input streams Bit Rate: Variable and Constant
EAS (Emergency Alert System)	Connector: 1x RJ-45 (trigger via 10/100 Remote Control port or Local Control #1 port) Standard: 10/100Base-T Ethernet Trigger Mechanism: Per SCTE-18 standard

Requirements for Pro:Idiom™ Output

SPTS	No. of programs: 1 program (not to exceed 38.8 Mbps) Null Packets: Required (as per Pro:Idiom™ requirements) Stream ID: User- assigned (as per Pro:Idiom™ requirements) Audio: Dolby® Digital compliant
MPTS	No. of programs: Max. 6 programs per MPTS (not to exceed 38.8 Mbps) Null Packets: Required (as per Pro:Idiom™ requirements) Stream ID: User- assigned (as per Pro:Idiom™ requirements) Audio: Dolby® Digital compliant

Output

QAM	No. of Output Modules: 4 Quad-QAM (total of 16 QAM channels) Connector: 1x "F" Female (rear-panel; for combined output) 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 1002 MHz Tuning: CATV Channel Selectable (CH. 2 to 158) Channels' Bandwidth: 24 MHz (4x Adjacent 6 MHz) 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 (@ +40 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%
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General

Dimensions (W x D x H):	19.0 x 18.125 x 1.75 inches (483 x 460 x 44 mm)
Power:	115-230VAC, 60/50Hz (Fuse:3.0A, 250VDC, Slo Blo)
Power Dissipation:	60 W
Weight:	12 lbs (5.4 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-condensing
Storage Humidity:	0 to 95% RH @ 35 °C max, non-condensing

Alarms/Monitoring/Control

Local Monitoring:	4x Output Status Module LEDs 1x "F" Female RF Test Port 1x Power LED 1x Status LED
Local Control:	1x IP Reset button
Remote Monitoring/Control:	GUI-based menu via Web browser (1x RJ45 front-panel connector; 10/100Base-T)

CAMPUS ENVIRONMENT / EMERGENCY ALERT

