



Blonder Tongue

HDE-CSV-QAM/IP

Single Channel HD Encoder

SOLUTIONS FOR ALL YOUR APPLICATIONS

The new and improved **HDE-CSV-QAM/IP** accepts one **HD** program from any of the following inputs: 1xComponent, 1xHD-SDI, 1xHDMI (unencrypted), 1xVGA, and 1xComposite. The MPEG-2 encoded outputs are available in the following formats simultaneously: 1xQAM, 1xASI, and 1xIP (100/1000Base-T Ethernet).

The 1xQAM RF output is frequency agile over the entire CATV frequency range of 5-1002 MHz, including sub channels T7-T14, and 2-158, with an output level of +40 dBmV.

Comprehensive remote monitoring and control is accomplished using any standard Web browser via a front-panel 100/1000 Ethernet connection. A rear-panel VGA output port is available for loop-through applications.

1xComponent/HD-SDI/HDMI/VGA/Composite

(1 Program)

HD MPEG-2 Encoding
DOLBY® Digital Audio Encoding



Features

- Accepts one program from any of the following inputs:
1xComponent, 1xHD-SDI, 1xHDMI (unencrypted), 1xVGA, and 1xComposite
- Simultaneously delivers 1xQAM, 1xIP, and 1xASI
- Provides +40 dBmV QAM RF output level
- Provides full QAM output coverage from 5 to 1002 MHz (sub channels T7-T14, and 2-158)
- Supports custom video and transport stream bit rate settings
- Supports user-defined PSIP configuration
- Supports Real-time Dolby® Digital audio encoding
- Supports Closed Captioning EIA-608 and EIA-708
- Provides comprehensive GUI-based monitoring and control via standard Web browsers
- Compact design permits installation of up to 3 Encoder modules in 1RU

Ordering Information

Model	Stock #	Description
HDE-CSV-QAM/IP	6382B	MPEG-2 HD Encoder; 1xComponent/HD-SDI/HDMI/VGA/Composite inputs; 1xQAM + 1xIP + 1xASI outputs
HDE-3MCH	6389	1RU Rack mount chassis; holds 3 modules

Made in U.S.A.

Dolby® is a registered trademark of Dolby Laboratories.



Rev: 052417

Blonder Tongue is ISO 9001:2015 Certified

Specifications

Input

Component Connectors: Video Resolution: Video Aspect Ratio: Audio:	3x RCA for Video (Y, Pb, Pr) 480i, 720p, & 1080i 4:3 & 16:9 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)
HD-SDI Connector: Standard: Video Resolution: Audio:	1x BNC SMPTE 292M 480i, 720p, & 1080i Embedded PCM and pass-through Dolby® Digital only
HDMI Connector: Video Resolution: HDCP Encryption: Audio:	1x HDMI 480i, 720p, & 1080i Not supported Embedded PCM & pass-through Dolby® Digital only
VGA Connectors: Video Resolution: Audio:	2x Female VGA (Input + Loop-through Output) 640x480 @ 60 fps 800x600 @ 60 fps 1024x768 @ 60 fps 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)
Composite Connectors: Video Resolution: Audio:	1x RCA for Video (Y) 480i 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)

Encoding Profile Video Output Format: Chroma: Resolution: Frame Rate: Aspect Ratio: GOP Structure: Video Bit Rate: Video Pre-filter: Color Space: Audio Output Format: Sampling Rate: Bit Rate:	MPEG-2 HD MP@ML; ISO 13818-2 4:2:0 480i, 720p, & 1080i 29.97 fps (480i); 29.97 fps (1080i); 59.97 fps (720p) 4:3 & 16:9 I & P frames (user-selectable) Variable (user-selectable) Variable (user-selectable) YCbCr and RGB Dolby® Digital 48 kHz Variable; 96 - 448 Kbps (user-selectable)
Closed Captioning Component: HD-SDI: HDMI: VGA: Composite:	EIA-608; 1x RCA (CC) EIA-708; Embedded in HD-SDI input EIA-608; 1x RCA (CC) EIA-608; 1x RCA (CC) EIA-608

Alarms/Monitoring/Control

Local Monitoring: Local Control:	1x Power LED 1x Status LED 1x IP Reset button
Remote Monitoring and Control:	GUI-based menu via standard Web browser (1x RJ45 connector; 100/1000Base-T, also used for IP output)

Related Products

Model	Description
HDE-CHV-QAM/IP	MPEG-2 HD Encoder; 1xComponent/HDMI/VGA/Composite to 1xQAM + 1xIP
HDE-1C-QAM	MPEG-2 HD Encoder; 1xComponent/Composite inputs to 1xQAM + 1xIP
HDE-8C-QAM	MPEG-2 HD Encoder; 8xComponent/Composite + 1xSpare to 4xQAM + 1xASI; EAS
HDE-8C-QAM/IP	MPEG-2 HD Encoder; 8xComponent/Composite + 1xSpare to 4xQAM + 1xASI + 8xIP; EAS

Output

QAM Connector: Modulation: Standards: DVB Symbol Rate: Frequency Range: Tuning: Channels' Bandwidth: RF Level: RF Level Adjustment: Frequency Tolerance: Frequency Stability: Amplitude Flatness: Phase Noise: Spurious: Broadband Noise: Impedance: Spectral Inversion: Carrier Suppression: Return Loss: Signal-to-Noise Ratio (SNR): MER: I/Q Phase Error: I/Q Amplitude Imbalance:	1x "F" Female (Rear-panel) QAM 16, 32, 64, 128, and 256 ITU-T J.83; Annex A and B Variable; up to 7 MSymbol/sec (MBaud) 5 to 1002 MHz CATV Channel Selectable (Ch. T7 to T14, 2 to 158) 6 MHz +40 dBmV ±1 dB +35 to +42 dBmV, 1 dB increment ± 0.5 kHz @ 77 °F (25 °C) ± 5 kHz over 32 to 122 °F (0 to 50 °C) ± 0.25 dB (over 6 MHz channel) -98 dBc (@ 10 kHz) -60 dBc -70 dBc (@ +40 dBmV output level, 5.5 MHz bandwidth) 75 Ω Auto Recognition 45 dB 14 dB typical 40 dB typical 40 dB typical Less than 1 degree Less than 1%
ASI Connectors: Format: Standard: TS Bit Rate:	1x BNC (Front-panel) DVB-ASI ETSI EN 50083-9 Variable (user-selectable)
IP Connector: Standard: TS Bit Rate: UDP/RTP:	1x RJ45 (Front-panel) 100/1000Base-T Ethernet Variable (user-selectable) Supported (user-selectable)

General

Dimensions (W x D x H):	5.65 x 14.10 x 1.72 inches (143.5 x 358.1 x 43.7 mm)
Power:	External Power Supply (Input 120 VAC / output 12 VDC @ 3 Amps)
Power Dissipation:	20 W
Weight (one module):	1.75 lbs (0.795 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