



Blonder
Tongue

HDE-CHV-QAM/IP

Single Channel HD Encoder

SOLUTIONS FOR ALL YOUR APPLICATIONS

The new and improved **HDE-CHV-QAM/IP** accepts one **HD** program from any of the following inputs: 1xComponent, 1xHDMI (unencrypted), 1xVGA, and 1xComposite. The MPEG-2 encoded outputs are available in 1xQAM 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.

HD MPEG-2 Encoding
DOLBY® Digital Audio Encoding

1xComponent/HDMI/VGA/Composite

(1 Program)



Features

- Accepts one program from any of the following inputs:
1xComponent, 1xHDMI (unencrypted), 1xVGA, and 1xComposite
- Simultaneously delivers 1xQAM and 1xIP outputs
- 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
- 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-CHV-QAM/IP	6384B	MPEG-2 HD Encoder; 1xComponent/HDMI/VGA/Composite inputs; 1xQAM + 1xIP 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: 3x RCA for Video (Y, Pb, Pr) Video Resolution: 480i, 720p, & 1080i Video Aspect Ratio: 4:3 & 16:9 Audio: 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)
HDMI	Connector: 1x HDMI Video Resolution: 480i, 720p, & 1080i HDCP Encryption: Not supported Audio: Embedded PCM & pass-through Dolby® Digital only
VGA	Connectors: 2x Female VGA (Input + Loop-through Output) Video Resolution: 640x480 @ 60 fps 800x600 @ 60 fps 1024x768 @ 60 fps Audio: 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)
Composite	Connectors: 1x RCA for Video (Y) Video Resolution: 480i Audio: 2x RCA for Analog Audio (L, R) 1x RCA for Digital Audio (PCM)

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

Alarms/Monitoring/Control

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

Related Products

Model	Description
HDE-CSV-QAM/IP	MPEG-2 HD Encoder; 1xComponent/HD-SDI/HDMI/VGA/Composite to 1xQAM + 1xASI + 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: 1x "F" Female (Rear-panel) 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: 5 to 1002 MHz Tuning: CATV Channel Selectable (T7 to T14, 2 to 158) Channels' Bandwidth: 6 MHz RF Level: +40 dBmV ± 1 dB RF Level Adjustment: +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: 40 dB typical I/Q Phase Error: Less than 1 degree I/Q Amplitude Imbalance: Less than 1%
IP	Connector: 1x RJ45 (Front-panel) Standard: 100/1000Base-T Ethernet TS Bit Rate: Variable (user-selectable) UDP/RTP: 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:	16 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