



Blonder Tongue

HDE-1C-QAM

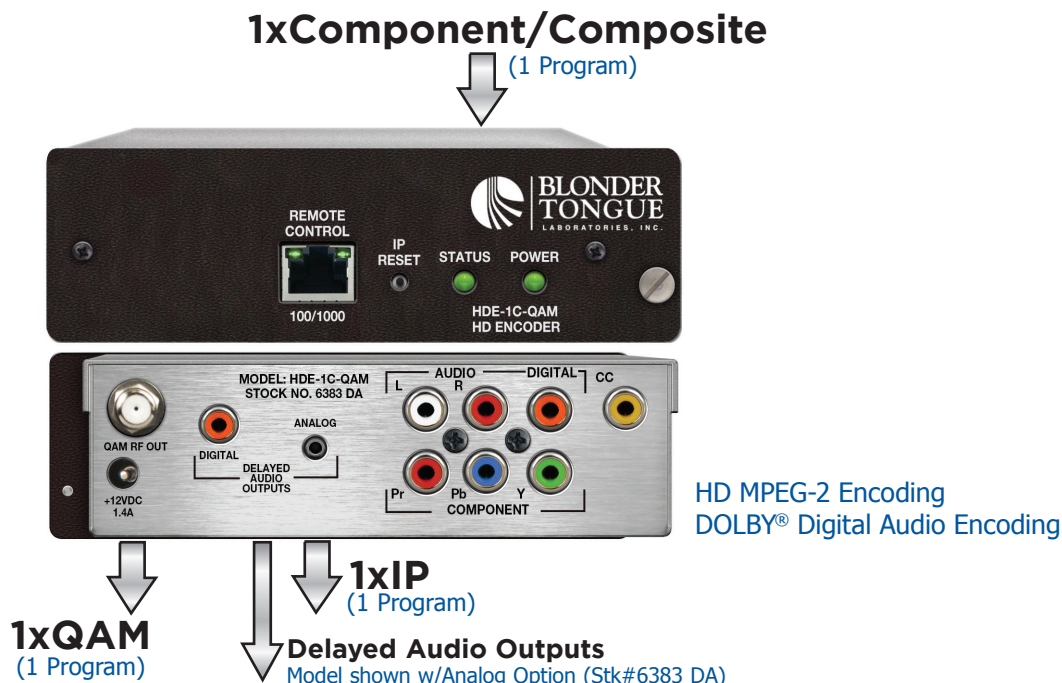
SINGLE CHANNEL HD ENCODER

1xComponent/Composite to 1xQAM+1xIP

SOLUTIONS FOR ALL YOUR APPLICATIONS

HDE-1C-QAM (MPEG-2 HD Encoder – 1xComponent/Composite – 1xQAM + 1xIP) accepts one (1) high-definition (HD) program from a component input or (1) standard definition (SD) from a composite video input. MPEG-2 encoded outputs are available in the following formats simultaneously: 1xQAM and 1xIP (100/1000Base-T Ethernet). The QAM RF output is frequency agile over the entire CATV frequency range of 5-1002 MHz (channels T7 to T14, 2 to 158) with an output level of +40 dBmV. The encoder also has a Delayed Audio output feature to provide proper lip-syncing when external audio amplifiers are used in the system.

The encoder supports Dolby® Digital audio encoding and Closed Captioning (EIA-608). Comprehensive remote monitoring and control is accomplished using any standard Web browser via a front-panel 100/1000 Ethernet connection.



Features

- Accepts one (1) program from any of the following inputs: 1xComponent or 1xComposite
- Delivers the following outputs: 1xQAM + 1xIP
- Provides +40 dBmV QAM RF output level
- Provides comprehensive GUI-based monitoring and control via standard Web browsers
- Compact design permits installation of up to 3 Encoder modules in 1RU
- Supports Real-time Dolby® Digital audio encoding
- Supports user-defined PSIP configuration
- Supports Closed Captioning EIA-608
- Full QAM output channel coverage from 5 to 1002 MHz (T7 to 158)
- Delayed Digital Audio Output feature for external audio applications
- Optional Analog Delayed Audio Output for public address system interface

Ordering Information

Model	Stock #	Description
HDE-1C-QAM	6383	MPEG-2 HD Encoder; 1xComponent/Composite inputs; 1xQAM + 1xIP outputs
	6383 DA	MPEG-2 HD Encoder with Delayed Analog Audio Output
HDE-3MCH	6389	1RU Rack mount chassis; holds 3 HDE-1C-QAM modules

Made in U.S.A.

Dolby® is a registered trademark of Dolby Laboratories.

Rev: 101416
Blonder Tongue is ISO 9001:2008 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)
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: Transport Rate: Video Bit Rate: Video Pre-filter: Color Space:	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) Variable (user-selectable) YCbCr and RGB
Audio Output Format: Sampling rate: Bit rate:	Dolby® Digital 48 kHz Variable; 96 - 448 Kbps (user-selectable)
Closed Captioning Component: Composite:	EIA- 608; 1x RCA (cc) EIA- 608

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 115-230VAC / Output 12VDC @ 3 Amp)
Power Dissipation:	17 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

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 (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%
IP Connector: Standard: UDP/RTP:	1x RJ45 (Front-panel) 100/1000Base-T Ethernet Supported (user-selectable)
Delayed Audio Output Digital Connector: Delay: Analog Option (#6383 DA) Connectors: Delay:	(Applicable only when using L/R Audio Inputs) 1x RCA 0-2000 msec, 1 msec increments 1x 3.5mm Stereo Jack 0-2000 msec, 1 msec increments

Alarms/Monitoring/Control

Local Monitoring: Local Control:	1x Power LED 1x Status LED 1x IP Reset button
Remote Monitoring/Control:	GUI-based menu via Web browser (1x RJ45 connector; 100/1000)

Related Products

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