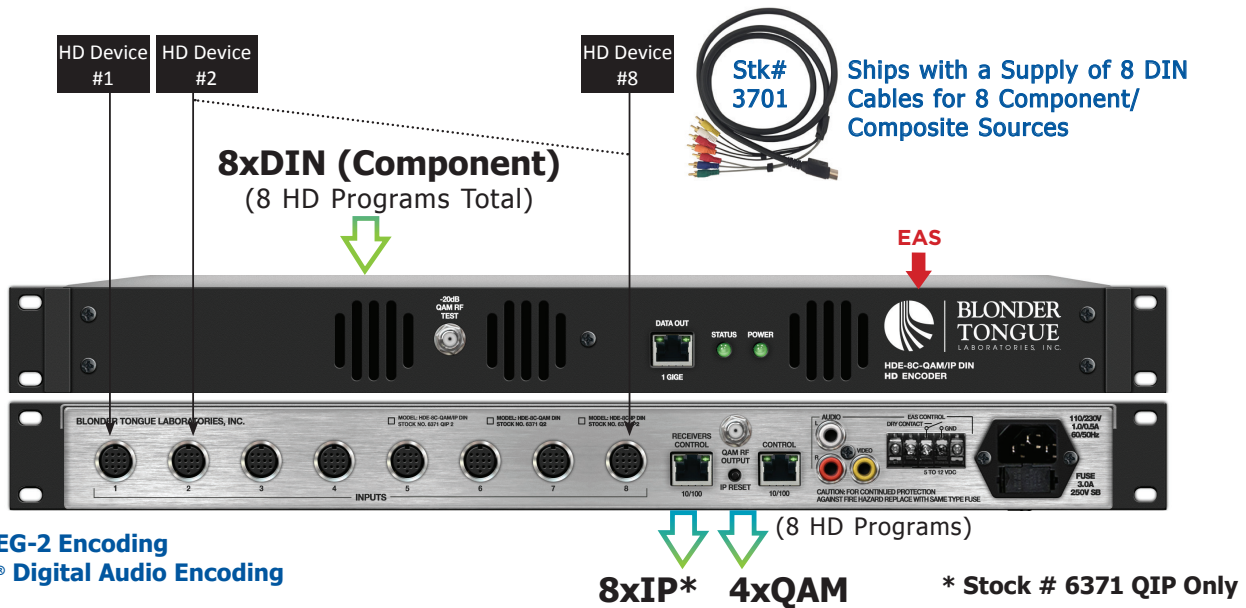Blonder Tongue

HDE-8C DIN
MPEG-2 HD Encoder

The **HDE-8C DIN** encoders are designed to be used with any eight (8) sources providing component/composite video outputs.

The **HDE-8C-QAM DIN** encoder digitizes and MPEG-2 encodes each input into a high-definition stream. The eight (8) program streams are multiplexed and then modulated onto four adjacent QAM channels in the 54-1002 MHz range (CATV 2-158).

The **HDE-8C-QAM/IP DIN** encoder includes an IP output to provide 8xSPTS.

HD Device #1   HD Device #2   HD Device #8

8xDIN (Component)
(8 HD Programs Total)

Stk# 3701   **Ships with a Supply of 8 DIN Cables for 8 Component/Composite Sources**

EAS

(8 HD Programs)

HD MPEG-2 Encoding
DOLBY® Digital Audio Encoding

8xIP*   **4xQAM**   * Stock # 6371 QIP Only

Features

- Accepts 8 HD programs from DIN inputs
- Digitizes, MPEG-2 encodes, and modulates up to 8 inputs into 4xQAM output channels (2 Prog. per QAM Ch.)
- Configurable to ITU-T J.83 Annex A and B digital QAM formats
- Provides a front-panel -20 dB RF test point
- Provides 8xSPTS outputs on QAM/IP model
- Supports user-defined PSIP configuration
- Supports custom video and transport stream bit rate settings
- Supports Real-time Dolby® Digital audio encoding
- Supports Closed Captioning EIA-608 for each of the 8 encoded programs
- Equipped w/ EAS interface (Analog Video + L/R Audio) and triggering, compatible with all EAS receivers
- Provides comprehensive GUI-based monitoring and control via standard Web browsers

Ordering Information

Model	Stock #	Description
HDE-8C-QAM DIN	6371 Q	HD Encoder for 8 DIN (Component) inputs; 4xQAM outputs
HDE-8C-QAM/IP DIN	6371 QIP	HD Encoder for 8 DIN (Component) inputs; 4xQAM + 8xIP outputs
H258C DIN to RCA Cable	3701	13 Pin DIN to 7xRCA Cable; 72 inches

HDE-8C DIN
MPEG-2 HD Encoder

Specifications

Input

Component

Connectors:	8xDIN (13 pin); each DIN socket provides connections for component video, L/R audio, digital audio (PCM and Dolby® Digital pass-through only) and Closed Captioning
Video Resolution:	480i, 720p, & 1080i
Video Aspect Ratio:	4:3 & 16:9

EAS (Emergency Alert System)

Connectors:	3x RCA (Video, Audio L & R)
Trigger Mechanism:	5-12 VDC & Dry Contact Closure (Terminal Strip)

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); 59.97 fps (720p); 29.97 fps (1080i)
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)

Audio

Output Format:	Dolby® Digital
Sampling rate:	48 kHz
Bit rate:	Variable; 96-448 Kbps (user-selectable)

Closed Captioning

Connector:	via DIN
Component:	EIA- 608

Output

QAM

Connector:	1x "F" Female (rear panel; up to 4x RF QAM ch. combined)
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)
Channel Bandwidth:	24 MHz (4x Adjacent 6 MHz)
RF Level:	+40 dBmV ± 1 dB (4 channels combined)
RF Level Adjustment Range:	+35 to +42 dBmV, 1 dB increments
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%

GigE *

Connector:	1xRJ45 (front panel)
Standard:	1000Base-T Ethernet
TS Bit Rate:	Variable (user-selectable)
UDP/RTP:	Supported (user-selectable)
Address Assignment:	8xIPv4 Address and port numbers (user-selectable)

* Stock # 6371 QIP Only

Alarms/Monitoring/Control

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

General

Dimensions (W x D x H):	19.0 x 16.0 x 1.75 inches (483 x 406 x 45 mm)
Power:	110 - 230 VAC, 50/60 Hz (Fuse: 4.0A, 250 VDC, Slo Blo)
Power Dissipation:	~60 W
Weight:	~7.2 lbs (3.27 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