



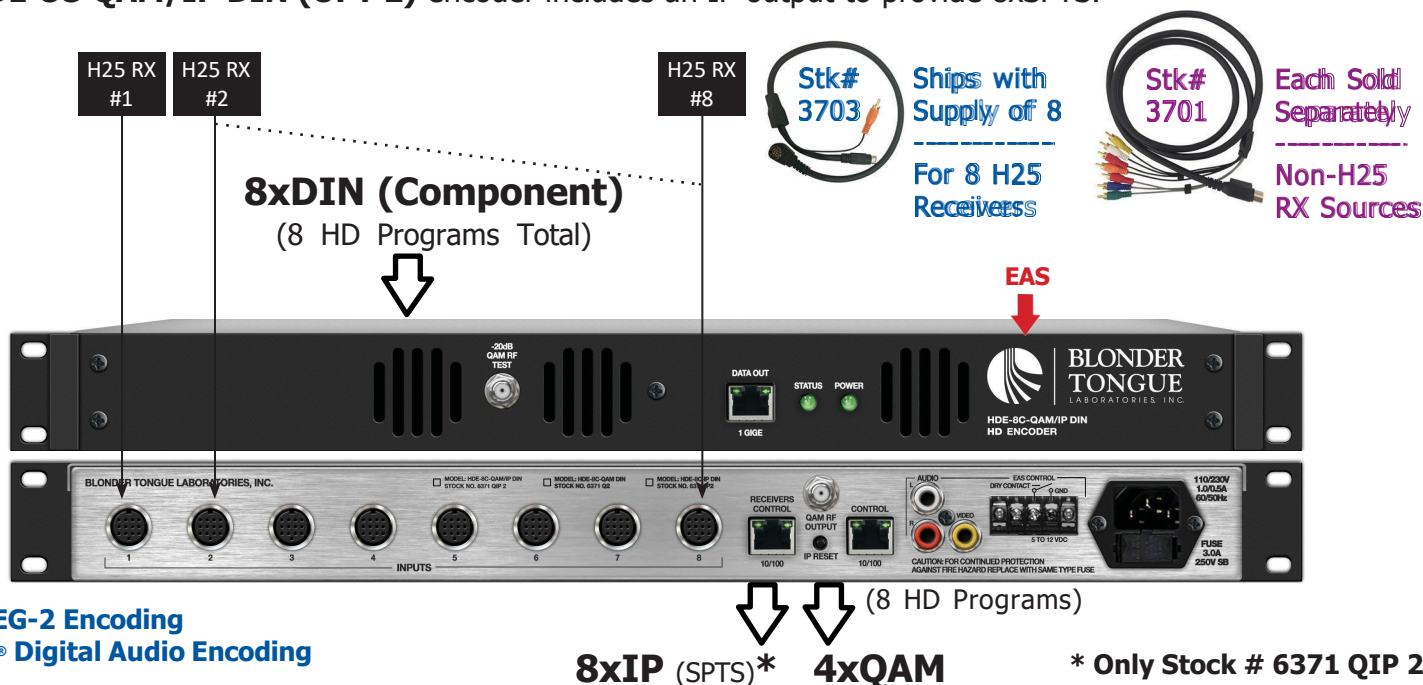
HDE-8C DIN (Opt 2)

MPEG-2 HD Encoder for DIRECTV

The **HDE-8C DIN (OPT 2)** encoders are designed to be used with eight (8) DIRECTV H25 satellite receivers, or any non-H25 receiver source providing component/composite video outputs.

The **HDE-8C-QAM DIN (OPT 2)** 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 (OPT 2)** encoder includes an IP output to provide 8xSPTS.



HD MPEG-2 Encoding
DOLBY® Digital Audio Encoding

8xIP (SPTS)* 4xQAM

* Only Stock # 6371 QIP 2

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 1.83 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 (OPT 2)	6371 Q 2	HD Encoder for DIRECTV H25 RX Control; 4xQAM outputs
HDE-8C-QAM/IP DIN (OPT 2)	6371 QIP 2	HD Encoder for DIRECTV H25 RX Control; 4xQAM + 8xIP outputs
H258C DIN to RCA Cable	3701	13 Pin DIN to 7xRCA Cable; 72 inches
H258C DIN Cable	3703	10 Pin DIN + 1xRCA to 13 Pin DIN Cable; 24 inches

Made in U.S.A.

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Blonder Tongue is ISO 9001:2015 Certified

Rev: 042418

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: Video Aspect Ratio:	480i, 720p, & 1080i 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 2 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



Related Products

Model	Description
AQT8-QAM/IP	8xATSC/QAM inputs; IP + QAM outputs
HDE-CSV-QAM/IP	1xComponent/HD-SDI/HDMI/VGA/Composite inputs; 1xQAM + 1xASI + 1xIP outputs
HDE-CHV-QAM/IP	1xComponent/HDMI/VGA/Composite inputs; 1xQAM + 1xIP outputs
BT-HE-DASHBOARD	Headend Controller for up to 20 supported units including: HDE-8C-QAM w/Opt 2, HDE-8C-QAM DIN (Opt 2), AQT8-QAM/IP, and AQT8-IP
BaR GameChanger	Blonder Tongue's Free iOS/Android App provides personalized TV control service for Bars & Restaurants allowing control all viewing locations with this easy-to-use, easy-to-configure app that runs on wi-fi.