



# Blonder Tongue

# SDE-6S-ASI

## MPEG-2 SD Encoder/Multiplexer

### 6xSD-SDI/NTSC to 2xASI/IP

## SOLUTIONS FOR ALL YOUR APPLICATIONS

**SDE-6S-ASI** (MPEG-2 SD Encoder/Multiplexer – 6xSD-SDI/6xNTSC to 2xASI/IP) accepts up to six (6) standard-definition (SD) programs from any of the following inputs: 6xSD-SDI, and/or 6xNTSC. MPEG-2 encoded outputs are multiplexed into one Multi Program Transport Stream (MPTS) which is available in the following formats simultaneously: 2xASI (mirrored), and 1xIP (100/1000 BaseT).

The encoder supports Dolby® Digital audio encoding for (16) analog stereo audio pairs (L+R) which in addition to primary and secondary audio programs also provide a third pair for the Audio Descriptor Service, an additional narration track for blind and visually impaired, as mandated by the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA).

Ad insertion SCTE 35 compliant queuing messages are detected for each program from either the multiple audio Cue Tone inputs or an insertion contact closure (operator selectable).

A baseband audio analog encoding capability table is provided on the following page for easy reference. In addition to the baseband audio analog encoding capability audio programs that are already encoded and present on the SDI inputs may be multiplexed with the respective output (pass-through) without utilizing the baseband audio analog encoding resource.

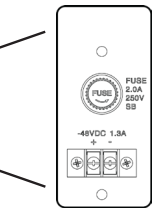
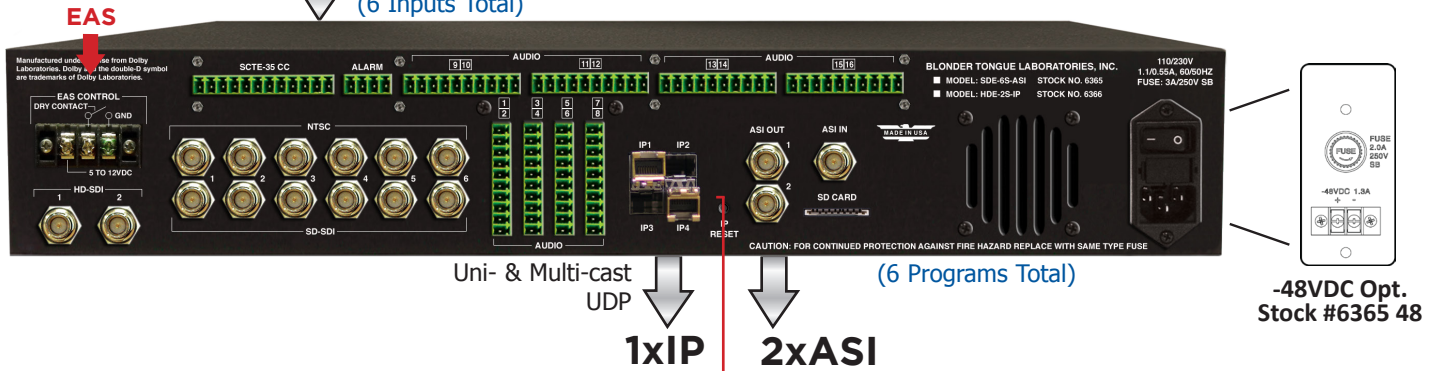
The encoder also supports Closed Captioning (EIA-608, and EIA-708), and Emergency Alert System (EAS). A front-panel DVI port is available for real-time monitoring of active programs during operation.

Comprehensive remote monitoring and control is accomplished using any standard Web browser via a rear-panel SFP port (10/100BaseT).

### 6xSD-SDI or NTSC



MPEG-2 SD Encoding  
DOLBY® Digital Audio Encoding



-48VDC Opt.  
Stock #6365 48

NOTE: Shown with 2 (supplied) SFP modules installed for control and data output

## Features

- Accepts up to six (6) video programs from any of the following inputs: 6xSD-SDI and/or 6xNTSC
- Simultaneously delivers the following outputs: 2xASI (mirrored) and 1xIP (100/1000 BaseT). SFP module is included.
- Provides comprehensive GUI-based monitoring and control using standard web browsers via 10/100 BaseT SFP module (included)
- Provides audio encoding for Primary Audio, SAP (Secondary Audio Program), & Audio Descriptor Service
- Provides user-selectable audio level adjustment of +/- 6 dB in 0.5 dB increments on all analog audio inputs through GUI interface
- Detects ad messaging via SCTE 35 activated by either multiple Cue Tone Audio inputs or upon contact closures (user selectable)
- Supports Closed Captioning EIA-608 and EIA-708
- Supports Real-time Dolby® Digital audio encoding
- Supports Emergency Alert System (EAS)
- Supports user-defined static PSIP configuration
- Supports compressed digital audio pass through for all SDI inputs
- Supports fixed VBR and Stat-Mux video encoding

## Ordering Information

Model	Stock #	Description
SDE-6S-ASI	6365	MPEG-2 HD/SD Encoder/Multiplexer (2 HD-SDI or 8 SD-SDI inputs); 110-230VAC
	6365 48	MPEG 2 HD/SD Encoder with -48VDC Power
SDE-6S-HD-LIC	6366-LIC	Software upgrade to HDE-2S-IP (2 HD-SDI inputs or 8 SD-SDI inputs)

Rev: 041714 (651233400A)

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# Specifications

## Input

<b>SD-SDI</b>	<b>Connectors:</b> 6x BNC <b>Standard:</b> SMPTE 259M <b>Video Resolution:</b> 480i <b>Audio:</b> Embedded PCM and pass-through Dolby® Digital Analog Stereo Balanced Audio
<b>NTSC</b>	<b>Connectors:</b> 6x BNC for Analog Video 8x terminal strips for Analog Audio <b>Standard:</b> Analog Video <b>Video Resolution:</b> 525 lines per frame <b>Audio:</b> Analog Stereo Balanced Audio
<b>HD-SDI</b> (requires software upgrade)	<b>Connectors:</b> 2x BNC <b>Standard:</b> SMPTE 292M <b>Video Resolution:</b> 480i, 720p, & 1080i <b>Audio:</b> Embedded PCM and pass-thru Dolby® Digital Analog Stereo Balanced Audio (SD-SDI)
<b>EAS (Emergency Alert System)</b>	<b>Connectors</b> <b>BNC:</b> Video (User-selectable NTSC 1 to 6) <b>Terminal:</b> Audio (User-selectable Audio 1 to 16) <b>Standard:</b> Analog Audio/Video <b>Trigger Mechanism:</b> 5-12 VDC & Dry Contact Closure (Terminal Strip)

<b>Encoding Profile</b>	
<b>Video</b>	<b>Output Format:</b> MPEG-2 MP@ML, ISO 13818-2 <b>Chroma:</b> 4:2:0 <b>Resolution:</b> 480i <b>Frame rate:</b> 29.97 fps (480i) <b>Aspect Ratio:</b> 4:3 <b>GOP Structure:</b> I & P frames (user-selectable) <b>Transport Rate:</b> Variable (user-selectable) <b>Video Rate:</b> Variable (user-selectable) <b>Video Pre-filter:</b> Variable (user-selectable) <b>Color Space:</b> YCbCr
<b>Audio</b>	<b>Output Format:</b> Dolby® Digital <b>Sampling rate:</b> 48 kHz <b>Bit rate:</b> Variable; 96-448 Kbps (user-selectable) <b>Level Adjustment:</b> ± 6 dB, 1 dB increment (user-selectable)
<b>Digital Program Insertion (DPI)</b>	<b>Connectors:</b> Terminal strip for Cue Tone Audio <b>Standard:</b> SCTE 35
<b>Closed Captioning</b>	<b>SD-SDI:</b> EIA-608, EIA 708; (Embedded in input) <b>NTSC:</b> EIA-608 (Embedded in input)

## Output

<b>ASI</b>	<b>Connector:</b> 2x BNC (Rear-panel) <b>Format:</b> DVB-ASI <b>Standard:</b> ETSI EN 50083-9
<b>IP</b>	<b>Connector:</b> 1x SFP (Rear-panel) (SFP module included) <b>Standard:</b> IEEE 802.3 100/1000 Base-T Ethernet <b>Network Protocols:</b> UDP, RTP, multicast, unicast, MPTS output

## Baseband Analog Audio Encoding Capability

SD-SDI or NTSC Video Input #	1	2	3	4	5	6
<b>Primary Audio</b>	Y	Y	Y	Y	Y	Y
<b>Secondary Audio</b>	Y	Y	Y	Y	Y	Y
<b>Video Descriptor Audio</b>	Y	Y	Y	Y	Note 1	Note 1
<b>Cue Tone Audio</b>	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2
<b>Cue Tone via Contact Closure</b>	Note 3	Note 3	Note 3	Note 3	Note 3	Note 3

There are a total of sixteen (16) stereo analog audio encoding engines in the unit. The table above illustrates one example of how this resource may be utilized. In this example all the audio programs are provided as stereo baseband analog inputs. In this example none are provided by digital audio present on the SD-SDI inputs.

**Note 1:** In the example above, a third discrete Audio Encoder input will not be available for video inputs 5 and 6. However, the Secondary Audio for 5 and 6 can be used to provide the Video Descriptor Service instead of being used for a second language input.

**Note 2:** Detects ad insertion messages generated per SCTE 35 from multiple Cue Tone Audio inputs (user selectable).

**Note 3:** Detects ad insertion messages in a preset sequence per SCTE 35 activated by a contact closure (user selectable).

## General

<b>Dimensions (W x D x H):</b>	19.0 x 16.0 x 3.5 inches (483 x 406 x 89 mm); 2RU
<b>Power:</b> <b>Stock #6365:</b> <b>Stock #6365 48:</b>	110-230VAC, 60/50Hz (Fuse: 3.0A, 250V, SloBlo) -48VDC (Fuse: 2.0A, 250V SloBlo)
<b>Power Dissipation:</b>	100W (MAX)
<b>Weight:</b>	17 lbs (3.6 kg)
<b>Operating Temperature:</b>	32 to 122 °F (0 to 50 °C)
<b>Storage Temperature:</b>	-13 to 158 °F (-25 to 70 °C)

## Alarms/Monitoring/Control

<b>Local Monitoring:</b>	1x Input and 1x Status LEDs 1x Power LED 1x DVI Port
<b>Local Control:</b>	1x IP Reset button
<b>Remote Monitoring/Control:</b>	GUI-based menu via Web browser (1x SFP rear-panel port; 10/100Base-T) (SFP included) SD card based S/W upgrade (future option)

## Related Products

Model	Description
HDE-2S-IP	MPEG-2 HD/SD Encoder; Accepts 2x HD-SDI or 8x SD-SDI inputs
HDE-2H/2S-QAM	MPEG-2 HD Encoder; 2xHDMI + 2xHD-SDI +2xComponent inputs; 4xQAM + 4xGigE + 4xASI outputs; EAS compatible; 1RU
HDE-4S-QAM	MPEG-2 HD Encoder; 4xHD-SDI + 4xComponent inputs; 4xQAM + 4xGigE + 4xASI outputs; EAS compatible; 1RU
HDE-CHV-QAM	MPEG-2 HD Encoder; 1xComponent/HDMI/VGA/Composite inputs; 1xQAM+1xASI+1xIP outputs
HDE-CSV-QAM	MPEG-2 HD Encoder; 1xComponent/HD-SDI/HDMI/VGA/Composite inputs; 1xQAM+1xASI+1xIP outputs
HD264-2S-IP	H.264 HD Encoder; 2xHD-SDI + 2xHDMI + 2xComponent inputs; 2xIP + 4xASI outputs; 1RU