

# LiveStream

## SD H264/AVC Encoder



### Encode, store, transcode and stream broadcast-quality video

Traditional Broadcast, IP and mobile network technologies are converging to provide seamless, multi-screen services to meet ever increasing anytime, anywhere end-user demand. Encoding systems are at the heart of high quality video services to TV, PC and Mobile screens. Ecrin encoding platforms deliver superlative end-to-end on-the-fly and off-line image compression quality to meet the needs of Production Studios, IPTV, Internet TV and Mobile TV Screen Network Operator's.

#### Improve Workflow

LiveStream is the professionals' choice for high quality Content Contribution (Point-to-Point), typically Live Event to Studio, Studio to Studio or delivery to a Content Distribution Network (CDN). Designed for SD/HD live streaming the LiveStream Hardware Encoder can deliver up to two simultaneous SDI input streams in H.264 with different bit rates and quality to 20 addresses over IP.

#### Flexibility

Encode and transcode broadcast-quality video at data rates from 1 to 20Mb/s to IP or internal Hard Drive. The MPEG2 to H264 transcoding functionality reduces the original MPEG2 bandwidth by half while preserving broadcast quality video. Three Gigabit Ethernet RTP-UDP/IP ports stream up to 20 IP Addresses in either Unicast or Multicast enabling flexibility for the Broadcaster, Telco's and Contribution Operators alike.

























#### Intuitive System Interface/Appliance Management

Complete system management is easily undertaken through either the local HMI front panel or remotely from any web enabled PC. Start/Stop or manage up to 100 Profiles remotely through the web interface or monitor and hardware status such as chassis cooling temperatures, fan speeds and alarms. SNMP v3.0 (Simple Networking Management Protocol) and low power consumption technology ensures a high level of security and reliability.

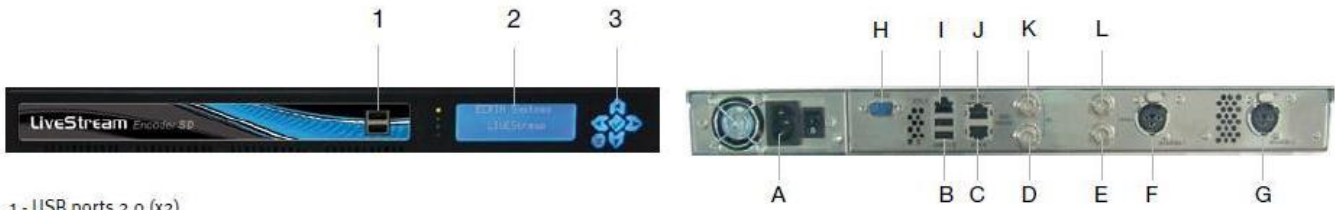
#### Compact Footprint

The 1U/19" rack mounting unit provides up to two Encoding/Transcoding channels in a compact footprint with up to 1TB of internal Hard Disk storage capacity. The LiveStream 99.99% operational reliability design concept ensures highly dependable performance.

### Features

 >  > 	Encode SDI video input and stream to IP
 >  > 	Encode SDI video input and store to HDD
 >  > 	Read H264 video from HDD and stream to IP
 >  > 	Encode XLR AES-EBU or embedded audio. MPEG1 Layer 2, AC3, AAC supported
 >  > 	Read MPEG2 video from IP, transcode to H264 format and stream to IP
 >  > 	Read MPEG2 video from IP, transcode to H264 format and store to HDD
 >  > 	Read MPEG2 video from HDD, transcode to H264 format and stream to IP
 >  > 	Read MPEG2 video from HDD, transcode to H264 format and store to HDD

# LiveStream SD H264/AVC encoder



- 1 - USB ports 2.0 (x2)
- 2 - 4 lines of 20 characters display
- 3 - Keyboard - On/Off, Reset, User utilities

- A - Power inlet
- B - USB 2.0 ports (x2)
- C - Gigabit Ethernet Port (ETHo)
- D - SDI IN channel 2
- E - SDI Monitoring channel 2
- F - Audio IN channel 2
- G - Audio IN channel 1
- H - RS422 Port
- I - Gigabit Ethernet Port (ETH2)
- J - Gigabit Ethernet Port (ETH1)
- K - SDI IN channel 1
- L - SDI Monitoring channel 1

## Technical Features

<b>FUNCTION</b>	Encoding: Up to 2 channels Transcoding: Up to 2 channels
<b>VIDEO and AUDIO INPUTS</b>	Encoding: Up to 2 SD-SDI (SMPTE 259M) Transcoding: MPEG2-Transport Stream over RTP-UDP/IP or HDD
<b>VIDEO and AUDIO OUTPUTS</b>	MPEG2 Transport Stream over UDP-RTP/IP or HDD
<b>VIDEO RESOLUTIONS</b>	720x480 59.94i, 720x576 50i
<b>VIDEO SPECIFICATION</b>	Standard compression: H264/AVC Main Profile Level 3.0, High Profile Level 4.0 - CBR,VBR - 4:2:0 encoding - Video encoding rate: 2 to 10Mb/s
<b>AUDIO INPUT</b>	Serial Digital AES (balanced, un-balanced) Embedded in SDI
<b>AUDIO SPECIFICATION</b>	Encoding formats: - MPEG-1 Audio Layer 2 - Dolby Digital (AC-3*) 2-ch - MPEG-2 AAC (LC profile) 2-ch - LPCM 2-channels
<b>IP INPUT/OUTPUT</b>	3 GbE RJ45, RTP-UDP/IP, Unicast/Multicast Stream up to 20 different IP addresses
<b>STORAGE CAPACITY</b>	1TBytes SATA Hard Disk Drive
<b>APPLIANCE MANAGEMENT</b>	Remote: Web based management, SNMPv3 manageable Local MMI / LCD-Keypad Security: Fan control, Temperature control Presets: Up to 64 different decoding profiles Wake on LAN RS422 Automation
<b>DIMENSIONS/WEIGHT</b>	19.0" x 1RU x 43.9 cm depth/7.9 kg
<b>POWER SUPPLY</b>	Input Voltage Range: 90-264VAC Power consumption: (Max) 80W, 2 channels
<b>ENVIRONMENTAL</b>	Temperature: Operating 0°C to 50°C, Storage -20°C to 70°C, Humidity 85% non condensing
<b>CE COMPLIANCE</b>	EMC: EN55022, EN55024 Safety: EN 60950

## Ordering information

<b>ENC-SD1-U:</b> 1 channel SD encoder, un-balanced Audio	<b>ENC-SD2-U:</b> 2 channel SD encoder, un-balanced Audio
<b>ENC-SD1-B:</b> 1 channel SD encoder, balanced Audio	<b>ENC-SD2-B:</b> 2 channel SD encoder, balanced Audio



Sales office: Immeuble Le Bergson - 15, avenue Emile Baudot - 91300 Massy - France - Tel.: +33(0) 1 69 07 18 84  
Headquarters: 143, rue Louis Neel - Parc Technologique Pré Roux - 38920 Crolles - France - Tel.: +33(0) 4 76 92 20 01

sales@ecrin.com • www.ecrin.com