

ENC3711

PREMIUM H.264 HEVC HD SD ENCODER

DIBSYS



ENC3711, hardware platform has been widely deployed for H.265/HEVC and MPEG-4 AVC HD broadcasting applications with multiple video input interfaces (SDI, YPbPr, CVBS and HDMI) and Two pairs of Audio inputs.

For telcos and other IP-based service providers, the encoder is highly bandwidth efficient H.264/ H.265 VBR/ CBR encoding and native IP output make it possible to deliver exciting and competitive HD services. Especially use in Multi-Audio channel H.264/ H.265 HD 4:2:0 in High-End TV Studio Station, Cable, Satellite, IPTV, Terrestrial Application.

This unit is designed especially for high channel density Distribution Video Engineering project which support rapid deployment, and OSD/Logo/QR code Insertion.

Up to 2 stereo pairs of audio encoding are supported, in formats such as MPEG-1 Layer II, HE-AAC(v1&v2), LC-AAC and AC3 passthrough (SDI, HDMI only) in ultra low bitrate encoding. Additionally, embedded audio as well as support of closed captions transferred in the CVBS means efficient routing and simpler back-up system designs.

Features

- Simultaneous HEVC/H.265 and MPEG-4 AVC SD/HD encoding per chassis
- 1*HDMI/HD-SDI/YPbPr/CVBS, Composite video inputs
- Up to 2 audio stereo or 4 mono channels with Two XLR,Two RCA, Embedded SDI, one AES audio inputs
- Advanced multiplexing capabilities for cascading and multi-services through 2*DVB-ASI input
- Embedded audio on HD-SDI input
- MPEG1 Layer II, LC-AAC, HE-AAC v1, HE-AAC v2 and AC3 passthrough audio encoding (SDI or HDMI in)
- 4:2:0 encoding profiles for highest video quality
- Advanced Closed Caption insertion and transmission: CEA 608 (for CVBS in)
- Support OSD (QR code, LOGO and Caption) insertion
- Flexible GOP structures: IP, IBBP, IBBBP
- Simultaneous outputs via UDP/RTP/RTSP IP, DVB-ASI
- Management via embedded Web server
- One rack unit high, low-power consumption, stackable

Application

- HD H.265/H.264 for Digital Cable and Satellite
- Point to Point video and audio over IP In TV studio station
- Better quality and increased reach for IPTV
- Increased channel capacity for Satellite and Terrestrial TV

TECHNICAL SPECIFICATIONS

Video Inputs

1×SDI SD-SDI (SMPTE 259M), HD-SDI (SMPTE 292M)
800mV Level. 75Ω unbalanced, BNC
Return loss ≥ 15 dB, 5 to 1.4 GHz
Bit rate 1.485 Gbit/s ±10 ppm
1×CVBS PAL, NTSC, BNC, 75Ω unbalanced, BNC
Return loss ≥ 35 dB, 10Hz to 5.5MHz
1×YpbPr for HD only
1×HDMI

Audio Inputs

Interface 2×XLR, 2×AES, 2×RCA, 1×SDI
(support maximum 2 stereos synchronous processing),
1×HDMI

Stream Input

2*DVB-ASI Input Built-in multiplexer for encoder cascading

Stream Output

DVB-ASI 2 identical ASI output, 75Ω, BNC
RJ45 Port 1 IP (MPTS) over UDP / RTP /RTSP, 1000 Base-T
Ethernet interface*2 with independent IP addresses
(multicast/unicast)
MPEG TS over UDP, RTP, RTSP streaming
MPEG TS over DVB-ASI (EN 50083-9)
ASI and IP streaming simultaneously
7x188Bytes, Filter Null Packet

Video Processing

Resolution

Source	Input	Output
HDMI, SDI	1920×1080p@60/59.94	1920×1080P@60
	1920×1080p@50	1920×1080P@50
HDMI, SDI, YPbPr	1920×1080i@60/59.94	1920×1080P@30
	1920×1080i @50	1920×1080P@25
	1280×720p@60/59.94	1280×720p@60
	1280×720p@50	1280×720p@50
HDMI, SDI, CVBS	720×576i@50	720×576p@25
	720×480i@60	720×480p@30

Video Compression

Bitrate range
Encoding Schemes
GOP Structure
Chroma

HEVC/H.265 HD/SD
MPEG-4 AVC/H.264 HD/SD
1Mbps ~ 15Mbps
CBR/VBR
IP, IBBP, IBBBP
4:2:0

Audio Processing

Audio Inputs

Embedded SDI (up to 2 pairs per video input)

Encoding

2* R/L analog inputs, 2* XLR, 2*AES
MPEG-1 Layer II
HE-AAC (v1&v2)
LC-AAC

Sampling rate

AC3 pass through(for SDI and HDMI in)

Resolution

48KHz

Operating Modes

24-bit

Volume

Stereo, L-Mono, R-Mono

Bit-rate

Level 1-5

32Kbps~384Kbps

Data Processing

CC (closed caption)

EIA 608 (for CVBS in)

Management

Management

LCD/keyboard and web management

Language

English

Upgrade

Ethernet software upgrade

Environmental

Power consumption
Operation temperature
Storage temperature
Voltage range
Dimensions
Weight

15W

0~45℃

-20~80℃

AC110V±10%, 50/60Hz; AC 220V±10%,50/60Hz

482mm×405mm×44.5mm (W×D×H)

4.5Kg

Ordering Information

Product category	Product Model	Detail Description	Application
Similar Encoders	PREMIUM SD MPEG-2/AVC ENCODER ENC3111	1Ch SD-SDI/AV; 2Ch RCA/XLR Audio Encoding ; MPEG2/H264 SD; 4:2:0; DVB-ASI Cascading ;AAC/MPEG1L2; Small/SD Res; CBR/VBR	Point to Point Enc/Dec; DVB/ISDB-T One Seg, IPTV
Similar Encoders	PREMIUM SD and HD MPEG-2/AVC Encoder ENC3411 Plus	1Ch HD-HDMI/YPbPr/1Ch SD/HD-SDI/1Ch SD-AV; 4Ch RCA/XLR/1Ch AES Audio Encoding ; MPEG2/H264 SD/HD; 4:2:0/4:2:2;AAC/MPEG1L2/ AC3-52 ; Low latency; LOGO, QR code, OSD(option) ;CBR	Point to Point Enc/Dec; DVB/ATSC; IPTV
Similar Encoders	PREMIUM HD/SD ENCODER ENC3411	1Ch SD/HD-HDMI /HDSDI/YPbPr and 1Ch SD-AV; 2Ch RCA/XLR/1Ch AES Audio Encoding ; MPEG2/H264 SD/HD; 4:2:0/4:2:2; DVB-ASI Cascading; AAC/MPEG1L2/AC3Pass; Small Res PIP /HD_SD res; CBR	Point to Point Enc/Dec; DVB/ISDB-T On Seg, IPTV