

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)
- Flexible GOP structures: IP, IPBB, IPBBB
- 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
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Stream Input

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

DVB-ASI	2 identical ASI output, 75Ω, BNC
RJ45 Port	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	
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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	720×576i@50	720×576i@50
	720×480i@60	720×480i@60

Video Compression

Video Compression	HEVC/H.265 HD/SD MPEG-4 AVC/H.264 HD/SD
Bitrate range	1Mbps ~ 15Mbps
Encoding Schemes	CBR/VBR
GOP Structure	IP, IPBB, IPBBB
Chroma	4:2:0

Audio Processing

Audio Inputs	Embedded SDI (up to 2 pairs per video input) 2* R/L analog inputs, 2* XLR, 2*AES
Encoding	MPEG-1 Layer II HE-AAC (v1&v2) LC-AAC AC3 pass through(for SDI and HDMI in)
Sampling rate	48KHz
Resolution	24-bit
Operating Modes	Stereo, L-Mono, R-Mono
Volume	Level 1-5
Bit-rate	32Kbps~384Kbps

Data Processing

CC (closed caption)	EIA 608 (for CVBS in)
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Management

Management	LCD/keyboard and web management
Language	English
Upgrade	Ethernet software upgrade

Environmental

Power consumption	15W
Operation temperature	0~45℃
Storage temperature	-20~80℃
Voltage range	AC110V±10%, 50/60Hz; AC 220V±10%,50/60Hz
Dimensions	482mm×405mm×44.5mm (W×D×H)
Weight	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