

ENC3711Pro

Premium HEVC H.264 HD Encoder



DIBVISION | DIBSYS



ENC3711Pro, hardware platform has been widely deployed for H.265/HEVC and MPEG-4 AVC HD broadcasting applications with multiple video input interfaces (SDI and HD-MI) and audio input interfaces (HD-MI, SDI, AES, RCA and XLR).

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 (4 mono) of audio encoding are supported, in formats such as MPEG-1 Layer II, HE-AAC (v1&v2), LC-AAC and AC3 passthrough in ultra low bitrate encoding.

Features

- Simultaneous HEVC/H.265 and MPEG-4 AVC HD encoding per chassis
- 1*HD-MI/HD-SDI inputs
- Up to 2 audio stereo or 4 mono channels with Two* XLR, Two*RCA, 1*SDI (support maximum 2 stereos synchronous processing), 1*HD-MI, Two* 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
- 4:2:0 encoding profiles for highest video quality
- CC (closed caption) and Teletext supported
- Flexible GOP structures: IPPP, IBBP
- Simultaneous outputs via UDP/RTP/RTSP IP, DVB-ASI
- Management via embedded Web server
- One rack unit high, low-power consumption, stackable
- passed the EU CE certification

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 | 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×HD-MI | |

Audio Inputs

| | |
|-----------|--|
| Interface | 2×XLR, 2×AES, 2×RCA, 1×SDI (support maximum 2 stereos synchronous processing), 1×HD-MI |
|-----------|--|

Stream Input

| | |
|-----------------|--|
| 2×DVB-ASI Input | Built-in multiplexer for encoder cascading |
|-----------------|--|

Stream Output

| | |
|-----------|---|
| DVB-ASI | 2 identical ASI output, 75Ω, BNC |
| IP | 1*IP (MPTS) over UDP / RTP /RTSP |
| 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

| Source | OUTPUT | |
|---------------------|-----------------------------------|---------------------|
| | MPEG-4 AVC/H.264 HD | HEVC/H.265 HD |
| 1920×1080p@60/59.94 | 1920×1080p@60/59.94 | 1920×1080p@60/59.94 |
| 1920×1080p@50 | 1920×1080p@50 | 1920×1080p@50 |
| 1920×1080i@60/59.94 | 1920×1080i@60 1920×1080p@60/30 | 1920×1080p@60 |
| 1920×1080i@50 | 1920×1080i@50 1920×1080p@50/25 | 1920×1080p@50 |
| 1280×720p@60/59.94 | 1280×720p@60/59.94 | 1280×720p@60/59.94 |
| 1280×720p@50 | 1280×720p@50 | 1280×720p@50 |

Video Compression

HEVC/H.265 HD
MPEG-4 AVC/H.264 HD
HEVC/H.265: 0.5 – 20.00 Mbps
MPEG-4 AVC/H.264: 4 – 20.00 Mbp
CBR/VBR
IPPP, IBBP
4:2:0

Bitrate range

Encoding Schemes
GOP Structure
Chroma

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

Sampling rate

48KHz

Resolution

24-bit

Operating Modes

Stereo, L-Mono, R-Mono

Volume

Level 1-5

Bit-rate

48Kbps~384Kbps

Data Processing

CC (closed caption)
Teletext

Management

Management
Language
Upgrade

LCD/keyboard and web management
English
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-HD-MI/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-HD-MI /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 |