

ENC3311

DIBVISION | DIBSYS

Single Channel H.264 Full HD Encoder



ENC3311, a single channel H.264 encoder, this new professional FULL HD video encoder for a solution to address the needs of early adopters of the premium TV standard. With high-quality H.264 encoding, ENC3311 delivers FULL HD for an immersive experience with high-resolution and high-framerate.

ENC3311 encoder platform is available for both SD and HD MPEG4 AVC encoding. It is equipped with the latest advances in video compression technology to deliver unsurpassed video quality at lowest bitrates, and low latency to achieve high image quality video and audio transmission, fully support for SDI/ HD-SDI, CVBS, HD-MI, YPbPr interface inputs encoding, both IP and two identical ASI data outputs.

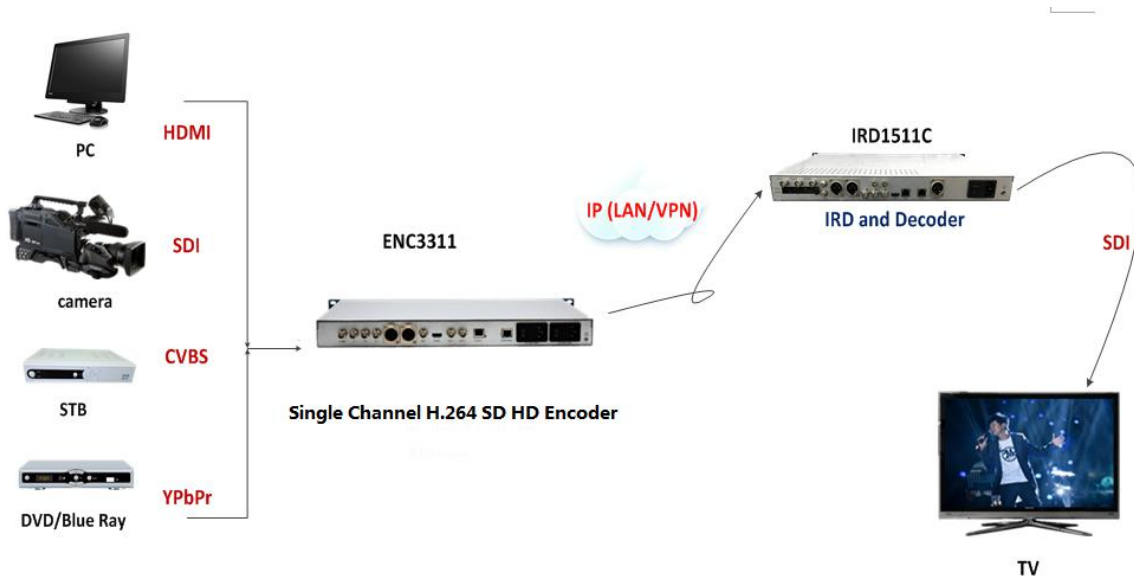
ENC3311 highly bandwidth efficient H.264 VBR CBR encoding and native IP output make it possible to deliver exciting and competitive HD services to broadcast operators.

Features

- Advanced MPEG-4 AVC 4:2:0 (H.264) video encoding
- ASIC technologies which offer broadcast, video quality, generally video bitrate advised: SD about 1.2mbps, 720p about 2mbps, 1080 about 6-8mbps for lowest bitrates
- HD-MI 1.3a interface, Auto detect the HD-MI input of resolutions
- Support the importation of SDI/HD-SDI, HD-MI, CVBS, YPbPr encoding
- Advanced multiplexing capabilities for cascading and multi-services via ASI input (optional)
- Audio sampling Rates: 44.1 khz, 32khz, 48KHz
- MPEG-1 Layer II, MPEG-2 AAC-LC, MPEG-4 AAC-LC, MPEG-2 HE-AAC, MPEG-4 HE-AAC audio encoding
- Supports unicast and multicast IP output UDP protocol as well as two identical ASI outputs
- WEB Management and local front panel
- Supports resolution: 1080p@50/59.94/60fps, 1080i@50/59.94/60fps, 720p@50/59.94/60fps, 480i, 576i
- Dual power supply supported
- Built-in time base correction and video pre-processing
- Easy-to-Use System Management

Main Application

- Digital TV and IPTV headend system
- Point to Point video and audio over IP
- Remote live Rebroadcasts and real-time transmission
- Building, campus or metropolitan-area



TECHNICAL SPECIFICATIONS

Input

Video Input	1 x CVBS, 75Ω, BNC 1 x Digital SMPTE 292M (HD-SDI) digital video, BNC 1 x HD-MI 1.3a 1 x YPbPr component video interface, Connector: BNC
Audio Input	analog stereo audio, XLR interface (balanced) HD-MI/SDI embedded audio
DVB-ASI Input (optional)	Built-in multiplexer for encoder cascading

Output

DVB Interface	Two identical ASI, Comply to EN 50083-9 ASI Standard, BNC, 75Ω
IP output	100/1000M Base-T Ethernet UDP/RTP output, Multicast/Unicast supported
Output Format	188 /204 bytes per UDP packet
Output Rate	0.25Mbps~20Mbps

Video Encoding

Video format	H.264 High profile/Level 4.0
Resolution	1920 x 1080p@50/59.94/60fps, 1920 x 1080i@50/59.94/60fps 1280x720p @50/59.94/60fps 720x480, 720x576, VBR, CBR IBBP, IPPP, IBP, IBrBBP
Bit rate mode	
GOP Structure	

Audio Encoding

Sampling Rates	48KHz, 44.1KHz, 32KHz
Bit rate	64, 128, 192, 256, 320 384kbps
Audio encoding	MPEG-1 Layer II, MPEG-2 AAC-LC, MPEG-4 AAC-LC, MPEG-2 HE-AAC, MPEG-4 HE-AAC
Quantization	24bit
Audio Gain	0 , +6db, +12db

Data Processing

PSI/SI Edition	PMT PID, Video Audio, PCR PID, Service ID Program Name, Service Provider TS id PCR Interval
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Management

Interface	1*RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	Web management
Local Control	LCD display and keypad

Environment

Power Supply	Comply to GB13837-92 & GB8898-88 standard
Power consumption	AC 100-250V 50/60Hz 20 W
Operation temperature	-10 - 50°C
Storage temperature	-10 - 75°C
Dimensions	450*350*44mm (1RU)
Weight	5Kg

Related Products

	ENC3311	ENC3311Plus	ENC3711Pro
video interface	1×SDI, 1×CVBS, 1×YPbPr, 1×HDMI	1×SDI, 1×CVBS, 1×YPbPr, 1×HDMI	1×HDMI, 1×HD-SDI
Video Encoding	H.264 HD/SD	MPEG-2/H.264	HEVC/H.265 HD MPEG-4 AVC/H.264 HD
Rate Control	CBR/VBR	CBR/VBR	CBR/VBR
GOP	IBBP, IPPP, IBP, IBrBBP	IBBP, IPPP, IBP, IBrBBP	IPPP, IBBP
Bit Rate	0.25-20Mbps	2-20Mbps	HEVC/H.265: 0.5 – 20.00 Mbps MPEG-4 AVC/H.264: 4 – 20.00 Mbps
Resolution	1920 x 1080p@50/59.94/60fps, 1920 x 1080i@50/59.94/60fps 1280x720p @50/59.94/60fps 720x480, 720x576	1920 x 1080i @60/50fps, 1280 x 720P@60/50fps, 720 x 480i @60fps, 720x576i @50fps In MPEG-2 encoding, only support SD output	1920×1080p @60/59.94 1920×1080p @50 1920×1080i @60/59.94 1920×1080i @50 1280×720p @60/59.94 1280×720p @50
Audio Interface	2*XLR(balanced) SDI/HDMI embed audio	2*XLR(balanced) SDI/HDMI embed audio	2×XLR, 2×AES, 2×RCA, SDI/HDMI embedded audio
Audio Encode	MPEG-1Layer2/MPEG2/AAC Audio	MPEG-1Layer2/MPEG2/AAC Audio	MPEG-1 Layer II, HE-AAC (v1&v2), LC- AAC, DD AC3 passthrough (for SDI and HDMI)
Audio Channel	1 Stereos	1 Stereos	Up to 2 stereos
Chroma	4:2:0	4:2:0	4:2:0
ASI output	YES	YES	YES
IP out	MPTS/SPTS over UDP/RTP	MPTS/SPTS over UDP/RTP	MPTS over UDP / RTP /RTSP