ENC3511

ULTRA HD HEVC ENCODER

With the significant increase in UHD TV hitting the market, Dibsys now is releasing a new professional UHD/4K video encoder for a solution to address the needs of early adopters of the premium TV standard. ENC3511 delivers UHD/4K for an immersive experience with high-resolution and high-framerate.

The encoder supports 4:2:2 and low-latency encoding; combined with its significant HEVC bitrate savings, content in real-time via HEVC (H.265), today’s most advanced compression standard. It is equipped with a 2 channels HDMI interface (1 channel input with 1 port for backup), which can encode 1 channel UHD/4K video signal.

The device supports ASI, Gigabit IP input and output, With its wide range of encoding tools, and excellent video quality, HEVC offers incredible compression efficiency, making live UHD/4K delivery available for satellite, cable, terrestrial, fiber networks and digital television broadcasting systems.

Features

- 2 channels HDMI 2.0 interface (for 1 channel input with 1 port for backup)
- Embedded hardware coding
- H.265 / HEVC and H.264 / MPEG-4 AVC Video encoding
- 2*ASI&128*IP input over UDP / RTP protocol
- 4*MPTS (UDP / RTP protocol) output
- Superior real-time HEVC compression, with ultra high video compression ratio
- MPEG-1 Layer2, LC-AAC, AC3 passthrough Audio encoding
- HDCP2.2, HDCP 1.4 supported
- 1 channel HDMI video loop out
- maximum 3840X2160@60P video coding
- VBR / CBR supported
- RGB / YCbCr 4:4:4 input supportedLow latency mode
- Low latency Mode
- PSI/SI editing/insert supported
- PID remapping
- Accurate PCR adjusting
- IP null packet filtering
- Real time output bitrate monitoring
- Management via External SNMP and WEB
- Easy-to-Use System Management
- Reliable: Hardware based for 24/7 operation

Application

- Digital television broadcasting systems
- satellite, cable, terrestrial and fiber networks
- Remote live Rebroadcasts and real-time transmission
- Building, campus or metropolitan-area

TECHNICAL SPECIFICATIONS

Inputs

	2 channels HDMI interface (for 1 channel input with 1 port for backup)
	Support HDCP 2.2, HDCP 1.4)
	HDMI embedded audio
	2*ASI input, BNC interface
	128*IP over UDP / RTP protocol

outputs

ASI Output	DVB Interface: ASI stream out, Comply to EN 50083-9 ASI Standard, BNC, 75Ω
MPEG-TS over IP Output	IP output: MPTS over UDP/RTP, 1000 Base-T Ethernet interface (unicast /multicast)
Output Format	188 bytes

Video Encoding

Comply to the International standard	HEVC/H.265, MPEG-4 AVC/H.264 encoding
Aspect ratio	16:9(HD)
Low delay	50-500 ms
Chroma	4:2:2, 4:2:0
Bit rate	2Mbps~36Mbps
Bit rate modet	VBR, CBR
GOP Structure	IBBP
	Scene change detection
	Brightness / Contrast / Saturation / Chroma /Horizontal Offset
	Stereo or Single channel

Video input

Resolution	3840×2160_60P, 3840×2160_50P, 3840×2160_30P, 3840×2160_25P, 1920×1080_60P, 1920×1080_50P
Frame	25Hz, 30Hz, 50 Hz, 60Hz
Chroma	RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0 (2160P_50/60 only)

Audio Encoding

Sampling Rates	48KHz
Bit rate	32~384kbps each channel
Audio encoding	MPEG-1 Layer2, LC-AAC , AC3 passthrough
Quantization	24bit
Packet	2-7
Audio gain	0-400

Multiplexing

2* ASI inputs, BNC350ms
Accurate PCR adjusting
Generate PSI/SI table automatically
PID remapping (automatically or manually)

Management

10/100 Base T Ethernet, RJ45
7 keys: Up, Down, Left, Right, Enter, Esc, Lock
Front-panel LCD configuration, LED indicate light
WEB management
Ethernet software & hardware upgrade

Environmental

	Comply to GB13837-92 & GB8898-88 standard
Power Supply	AC 100V-240V 50/60Hz, 2A
Power consumption	25W
Operation temperature	-10 - 50°C
Storage temperature	-10 - 75°C
Maximum Humidity	90%
Dimensions	482 (L)X255(W)X 44mm(H) (1RU)
Weight	4kg

