

# ENC3741S

## Premium HEVC H.264 FULL HD Encoder



DIBVISION | DIBSYS



**ENC3741S** content in a single slice in real-time via AVC (H.264) / HEVC (H.265), today's most advanced compression standards. Up to 12 HD video channels (4 channels in one module, up to 3 modules) can be encoded on the 1-RU chassis.

**ENC3741S** with its wide range of encoding tools, HEVC offers incredible compression efficiency, making distribution and delivery of live SD/HD content available for satellite, cable, terrestrial and fiber networks. All in one MPTS to Next digital TV equipment as like Multiplexer, IPQAM and DVB-T2 Networks and Push SPTS Over UDP/IP to LAN IPTV Network Simultaneously.

**ENC3741S** Ultra-low bitrate, Power-efficient, Full-featured HEVC/H.265, AVC/H.264 SD/HD Encoder is the best choice for any operator who wants to compress high-definition video using highly efficient HEVC compression. With high density, high reliability and advanced compress arithmetic, it is equipped with the latest advances in video compression technology to deliver unsurpassed video quality at low bitrates.

### Features

- 12 HD-MI video channels (4 channels in one module, up to 3 modules), SDI interface optional
- HD-MI 1.4, HDCP 1.4
- HD single-slice encoding
- Superior real-time HEVC/H.264 encoding
- MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough audio encoding
- Support **1080P @60fps** input and output
- CBR/VBR video bitrate mode supported
- IP Output 3\*MPTS & 12\*SPTS (1 MPTS and 4 SPTS per module) over UDP and RTP
- LOGO,QR code,OSD insertion (optional per module)
- Ultra-low bitrate to save 75% Bandwidth
- Enhance picture Quality: Advanced Compressing Algorithm
- Built-in time base correction and video pre-processing
- Real-time Transport Protocol (RTP) , RTSP and User Datagram Protocol (UDP) support
- PID Remapping & Filtering
- Null Packet Filter & Insertion
- Real-time output bit-rate monitoring
- Web-based user interfaces
- Ethernet software & hardware upgrade supported

### Main Application

- Carrier-grade Cable TV, Satellite Up-link
- Terrestrial DVB-T/T2 and ISDB-T/Tb
- TV studio station
- Low bitrate Live Streaming in limit Bandwidth
- 1080p@60fps FullHD Video encoding of IPTV

# TECHNICAL SPECIFICATIONS

## Input Interfaces

Number of Channels 4, 8 , 12 Ports, 4 channels in one module, up to 3 modules  
 HD-MI 1.4, HDCP 1.4, SDI interface optional

## Stream Output

**RJ45 Port** 1 MPTS and 4 SPTS (per module) output over UDP/RTP, 1000M/100M Base-T Ethernet interface  
 MPEG TS over UDP, unicast, and multicast streaming  
 MPEG TS over RTP, RTSP  
 7x188Bytes  
 Filter Null Packet

## TS Multiplexing

Built-in multiplexer for encoder cascading  
 75 Ω , BNC type, 188Bytes, ≅ 150Mbps  
 PSI/SI  
 PID Remap, SDT Insertion  
 Program Number, Program Name  
 Video/Audio/PMT/PCR PID

## Video Encoding

Video Compression HEVC/H.265, MPEG-4 AVC /H.264  
 Profiles and Levels H.264 Main, High Up to L4.2  
 Chroma 4:2:0  
 Bit rate 0.5Mbps~20Mbps (HEVC/ H.265)  
 4 Mbps~20Mbps (MPEG 4 AVC/H.264)  
 Encoding Schemes CBR/VBR  
 GOP Structure IBBP, IPPP  
 Advanced Preprocessing De-interlacing, Noise Reduction, Sharpening

## Audio Encoding

Sampling Rates 48KHz  
 Bit rate 48Kbps~384Kbps (MPEG-1 Layer 2 & LC-AAC)  
 24 Kbps~128 Kbps (HE-AAC)  
 18 Kbps~56 Kbps (HE-AAC V2)  
 Audio encoding MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough  
 Audio gain 0-255

## Resolution & Encoding Channels (per module) Version 1

Encoding Format	HEVC/ H.265, MPEG 4 AVC/H.264		
Resolution	input	output	
		HEVC/H.265	MPEG-4 AVC/H.264
Resolution	4*1080P-50fps	4*1080P-50fps	4*1080P-25fps 2*1080P-50fps
	4*1080P-60/59.94fps	4*1080P-60fps, 4*1080P-59.94fps	4*1080P-30fps 4*1080P-29.97fps 2*1080P-60fps 2*1080P-59.94fps
	4*1080I-50fps	4*1080P-50fps, 4*1080P-25fps	4*1080I-50fps 4*1080P-25fps 2*1080P-50fps
	4*1080I-60/59.94fps	4*1080P-60fps, 4*1080P-30fps	4*1080I-60fps 4*1080P-30fps 2*1080P-60fps
	4*720P-50fps	4*720P-50fps	4*720P-50fps
	4*720P-60/59.94fps	4*720P-60fps, 4*720P-59.94fps	4*720P-60fps 4*720P-59.94fps

## Version 2

Encoding Format	HEVC/ H.265, MPEG 4 AVC/H.264		
Resolution	input	output	
		HEVC/H.265	MPEG-4 AVC/H.264
Resolution	4*1080P-50fps	4*1080P-50fps	4*1080P-50fps
	4*1080P-60/59.94fps	4*1080P-60fps, 4*1080P-59.94fps	4*1080P-60fps 4*1080P-59.94fps
	4*1080I-50fps	4*1080P-50fps, 4*1080P-25fps	4*1080I-50fps 4*1080P-25fps 4*1080P-50fps
	4*1080I-60/59.94fps	4*1080P-60fps, 4*1080P-30fps	4*1080I-60fps 4*1080P-30fps 4*1080P-60fps
	4*720P-50fps	4*720P-50fps	4*720P-50fps
	4*720P-60/59.94fps	4*720P-60fps, 4*720P-59.94fps	4*720P-60fps 4*720P-59.94fps

## Management

Management Port Web-GUI, RJ45, 100M  
 Each module has independent NMS port management.  
 Language English/Chinese

## Environment

Power Supply AC 100-250V ± 10%, 50/60Hz  
 Power consumption 25W  
 Operation temperature -10 - 50°C  
 Storage temperature -10 - 75°C  
 Dimensions (H x W x D) 328 mm×482mm×44mm (1RU)  
 Weight 5kg

## Principle Chart

