

# ENC3281

DIBVISION | DIBSYS

## 8/16/24\* HDMI MPEG4 AVC HD Encoder



**ENC3281** This unit is designed especially for high channel density Distribution Video Engineering project which support rapid deployment, **OSD/Logo/QR code Insertion** and compatibility Up to **24 HD-MI inputs Simultaneously**. It's ideal encoder for anyone looking for an easy and affordable way to support a large number of HD channels in low cost deployment such as a Medium/Small-Scale digital Cable TV system, Hotel, Campus, Private TV station, LAN IPTV Network.

This solution is ideal for anyone looking for an easy and affordable way to support a large number of displays, such as a sports bar, house of worship, or digital signage. Multiple HD bridge units can be combined to create a headend that will support over 100 channels on your video network at each display. ENC3281 HD Encoder which is a professional HD Audio & Video encoding and multiplexing device encoder streams high-quality video and audio, and it uses the H.264 video compression standard and MPEG 1 Layer 2 audio LC-AAC, HE-AAC audio encoding format and AC3 Pass Through, and audio gain adjustment. Depending on the number of programs you have, you can very flexibly choose a different number of coding channels.

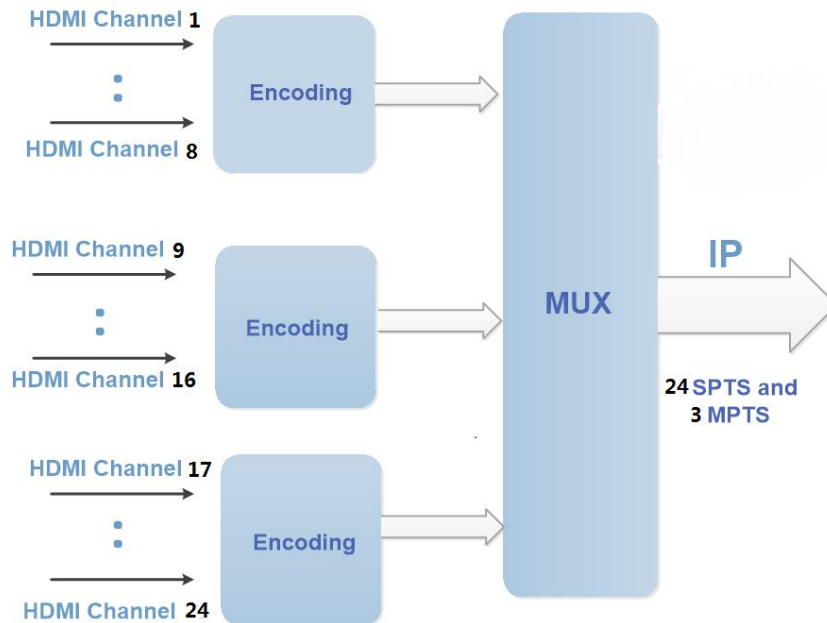
### Main Features

- High density, modular 1-RU system capable of hosting up to 3 HD-MI Encoding input modules, each with 8 HD-MI channels (share the same one NMS port and DATA port)
- MPEG-4 AVC HP@L4 video compression
- Feature to adjust the audio volume prior to encoding
- Simultaneous outputs via 8\* SPTS/1\* MPTS over GbE IP Port (each module)
- MPEG TS/UDP and RTP/RTSP over IP output
- **Support resolution downscale conversion**
- Simultaneous outputs IP
- PCR de-jittering and re-stamping
- Supports SD/HD formats and frames including 1080p, 720p, 576p, 480p@25/30fps
- Selectable the Value of PCR PID same as Video PID
- Support VBR and CBR bitrate mode
- PID Remapping & Filtering & CA Filter
- Support LOGO, QR code, OSD insertion for every, All or Each module of local channel
- One rack unit high density, low-power consumption, stackable
- Easy-to-use web GUI
- Low power consumption and high reliability with MTBF (Mean Time Between Failure)  $\geq$  87600 Hours
- Lowest cost per HD channel, breakthrough price

### Application

- Huge Number of HD channels In limited budget
- Migrate analog to DTV project
- Hotel, Campus of Video engineering project
- Convert Video to IP Connected with Camera, PC, Satellite Set Top Box, Local payout
- Applications in Logo, OSD Insertion of Video picture

Principle Chart



TECHNICAL SPECIFICATIONS

Input Interfaces

Number of Channels 8 ports, 16 ports, 24 ports, 3 modules  
 HD-MI 1.4a HDCP  
 Embedded in HD-MI (1 pairs per video)

Stream Output

RJ45 Port 100/1000M GbE Port, 10/100M FE Port, RJ45  
 Simultaneous output with 8\*SPTS and 1\*MPTS (each module)  
 through Data Port  
 MPEG TS over UDP, unicast, and multicast streaming  
 MPEG TS over RTP/RTSP  
 Configurable packet size(2-7)x188Bytes  
 Filter Null Packet  
 Total Bitrate 1-200Mbps (Should be More than Encoding bitrate)

Video Processing

Resolution

Input	Output
1920*1080_60P 1920*1080_60i	1920*1080_30P, 1280*720_30P, 720*480_30p
1920*1080_50P 1920*1080_50i	1920*1080_25P, 1280*720_25P, 720*576_25p
1280*720_60P	1280*720_30P, 720*480_30p
1280*720_50P	1280*720_25P, 720*576_25p
720*576_50i	720*576_25p
720*480_60i	720*480_30p

Encoding MPEG-4 AVC/H.264  
 Profiles and Levels H.264 Main, High Up to L4.2  
 Bit-rate 1Mbps~13Mbps  
 Encoding Schemes CBR, VBR  
 GOP Structure IPPPP (P Frame adjustment, without B Frame )  
 Select to configure Logo, Caption and QRCocder in any Position of Video Picture

Audio Processing

Encoding MPEG-1 Layer 2, LC-AAC, HE-AAC and AC3 pass through  
 Sampling rate 48KHz  
 Resolution 24-bit  
 Bit-rate 48/56/64/80/96/112/128/160/192/224/256/320/384kbps  
 (HE-AAC only up to 128kpps)  
 Audio Gain 0-255

Multiplexing

PID Processing Max.180 input per channel  
 PID remapping  
 PID Filtering  
 CA Filter  
 PSI/SI Editing Service Name, Program Number, Service Type,  
 Service Provider, PMT/PCR/Video/Audio PID  
 PMT descriptor Tag, PMT Descriptor Data  
 PCR Re-Jitter Accurate PCR adjusting  
 Configurable PCR Interval

System function

Web Network management  
 Chinese and English language  
 Ethernet software upgrade  
 Save/Restore/Facture Set/Backup/Load Setting  
 Log information printing in time

Environment

Dimension(W×L×H) 482mm×328mm×44mm  
 Approx weight 7.8kg  
 Temperature 0~45℃(Operation); -20~80℃(Storage)  
 Voltage range 100 to 120/200 to 240V AC ±10%; 50/60Hz  
 Power consumption 65W

Product Information

Models	Description
ENC3281A	8Chs HD-MI Input, 8*SPTS and 1*MPTS output, 1*NMS, 1*DATA
ENC3281B	16Chs HD-MI Input, 16*SPTS and 2*MPTS output, 1*NMS, 1*DATA
ENC3281C	24Chs HD-MI Input, 24*SPTS and 3*MPTS output, 1*NMS, 1*DATA