

HP801S MPEG2 H.264 HD SD one seg encoder



Product overview

HP801S, premium MPEG-2/ H.264 encoder, this new professional HD SD video encoder for a solution to address the needs of early adopters of the premium TV standard, especially use in Multi-Audio channel MPEG-2 H.264 in High-End Cable TV and ISDB-Tb Application.

With high-quality MPEG-2 H.264 encoding, HP801S delivers FULL HD for an immersive experience with high-resolution and high-framerate. It fully supports for SDI/ HD-SDI, CVBS, HD-MI, YPbPr interface inputs encoding, both IP and two identical ASI data outputs, and capable of simultaneously delivering low resolution channels for new applications such as picture-In-picture (PIP) and ISDB-Tb One-seg application.

HP801S highly bandwidth efficient MPEG-2, H.264 VBR CBR encoding and native IP output make it possible to deliver exciting and competitive HD services to broadcast operators.

Key features

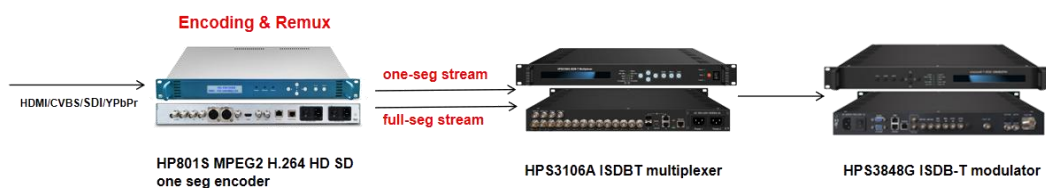
- Advanced MPEG-2 MP@ML4:2:0 and MPEG-4 AVC 4:2:0 (H.264) video encoding
- ASIC technologies which offer broadcast, video quality, generally video bitrate advised: SD about 1.2mbps, 720p about 2mbps, 1080 about 6-8mbps for lowest bitrates
- HD-MI 1.3a interface, Auto detect the HD-MI input of resolutions
- Support the importation of SDI/HD-SDI, HD-MI, CVBS, YPbPr encoding
- Low resolution channels for applications such as picture-in-picture (PIP: One-seg for ISDB-Tb)
- 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: 1080i@50/59.94/60fps, 720p@50/59.94/60fps, 480i, 576i
- DVB/ISDB-Tb compliance with 2 streams output simultaneously: for one-seg and full-seg
- Built-in time base correction and video pre-processing

- Easy-to-Use System Management
- passed the EU CE certification

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

Connection diagram



Technical specification

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	Audio Input analog stereo audio, XLR interface (balanced) HD-MI/SDI embedded audio
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, 2*SPTS and 1*MPTS Simultaneously output Multicast/Unicast supported
Output format	188 /204 bytes per UDP packet
Output rate	0.18Mbps~20Mbps
Video One SEG/PIP	
Resolution	352*288p/320*240p/320*180p /160*120p/160*90p
Encoding	H.264
Aspect Ratio	4:3; 16:9 Auto (follow the main stream)
Video PID	32 – 8190

Audio PID	PIP audio format is same as Main audio
Frame Rates	50fps, 59.94fps
Video Full-seg	
Video format	MPEG-2/H.264 MP@ML 4:2:0
Resolution	1920 x 1080i @60/50/59.94fps, 1280 x 720P@60/50fps, 720 x 480i @60fps, 720x576i @50fps
In MPEG-2 encoding, only support SD output.	
Bit rate mode	VBR, CBR
GOP Structure	IBBP, IPPP, IBP, IBrBBP
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
Management	
Interface	1*RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	Web management
Local Control	LCD display and keypad
Environment	
Comply to GB13837-92 & GB8898-88 standard	
Power Supply	AC 100-250V 50/60Hz
Power consumption	20W
Operation temperature	-10 - 50°C
Storage temperature	-10 - 75°C
Dimensions	450*350*44mm (1RU)
Weight	5kg