

HP3214B

Multi-Channel Encoder





Product Overview

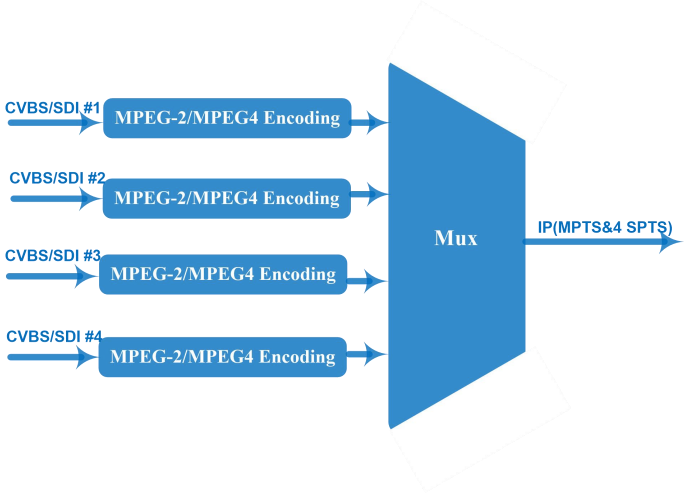
CATCAST HP3214B multi-channel encoder is our newest professional SD audio & video encoding and multiplexing device with powerful functionality. It is equipped with 4/8/12 CVBS or SDI channels input supporting MPEG-2, MPEG4 AVC/H.264. It can multiplex

the encoded TS to generate IP output through GE output port. It adopts the slot structure with one device supporting maximum 3 HP214B encoder modules. Each module can work standalone. In conclusion, its high integration and cost-effective design make this device widely used in variety of digital distribution systems such as CATV digital head-end and terrestrial digital TV, etc.

Key Features

- **Modular design, 1U chassis support up to 3 modules**
- **4/8/12×CVBS or SDI video inputs with MPEG-2 and MPEG4 AVC/H.264 Video encoding**
- **Support PAL and NTSC SD video formats (Only for CVBS interface)**
- **Support MPEG1 Layer 2, LC-AAC, HE-AAC and support audio gain adjustment**
- **Support IP output over UDP and RTP/RTSP**
- **Support Null PKT Filter**
- **Support Logo, Caption, QR Code insertion(Language Supported: 中文, English, اردو, for more languages please consult us…)**
- **Control via web management, and easy updates via web**

Principle Chart (per daughter module)



Technical Specification

Input	4/8/12 CVBS input , DB15-To-RCA interface ---Option Ⅰ 4/8/12 SDI input, BNC interface ---Option Ⅱ		
Video	Resolution	Input	Output
		720*576 @50i	720*576/352*288/320*240/320*180/176*144 /160*120/160*90@50Hz

		720*480 @60i	720*480/352*288/320*240/320*180/176*144 /160*120/160*90@60Hz
	Encoding format	MPEG-2, MPEG4 AVC/H.264	
	Bit-rate	0.5~5Mbps	
	Rate Control	CBR/VBR	
	GOP Structure	IPPP, IBPBP, IBBPB, IBBBP	
	Aspect Ratio	4:3, 16:9	
Audio	Encoding format	MPEG1 Layer 2, LC-AAC, HE-AAC	
	Sampling rate	48KHz	
	Bits per sample	32-bit	
	Audio Gain	-20~+12 adjustable	
	Bit-rate	48Kbps~384Kbps (each channel)	
Stream output	IP (1*MPTS and 4*SPTS) output over UDP and RTP/RTSP (unicast/multicast) per module,100M/1000M self-adaption		
System function	Network management (WEB)		
	Chinese and English language		
	Ethernet software upgrade		
Miscellaneous	Dimension(W×L×H)	482mm×328mm×44mm	
	Environment	0~45℃(work)；-20~80℃（Storage）	
	Power requirements	AC 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz	

Technical Comparison

	HP3228A	**HP3214B-4/8/12**
Chipset	Magnum	Magnum
Input interface	8× CVBS, BNC 8×SD-SDI input with embedded audio	4/8/12× CVBS Optional, RCA interface 4/8/12×SD-SDI , BNC interface (Modular design with each module supporting 4 channels, one chassis supporting up to 3 modules)
Bitrate	0.25~15Mbps for H.264 encoding 0.5~15Mbps for MPEG-2 encoding	0.5~5Mbps for both H.264 and MPEG-2 encoding
ASI In&Mux	1 ASI IN	N/A
ASI Output	2*ASI mirrored Output	N/A
IP Output	● 8 SPTS or 1 MPTS output over UDP (unicast / multicast) ● 10/100Base-T Ethernet interface * 1 ● one data port for all channels	● 4 SPTS and 1 MPTS output over UDP and RTP/RTSP for each module (unicast/multicast) ● 1000 Base-T Ethernet interface*1/2/3 ● one data port for one module (4 channels)
OSD insertion	N/A	Support logo/caption/QR Code insertion
Operation	● Web-based NMS ● SNMP (Optional)	● Web-based NMS

	● Front panel with LCD+Key board	
Control Mode	One NMS port for all channels	One NMS port for each module (4 channels)

CATCAST OSD Insertion

