

CatCast



HP8224HS

Multi-Channel Encoder



Product Overview

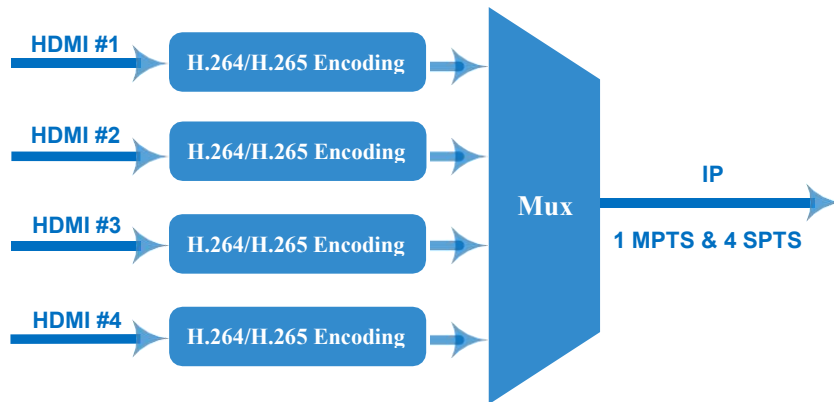
HP8224HS Multi-Channel encoder is a professional HD audio & video encoding and multiplexing device. It has 4/8/12 HDMI video input interfaces, and supports HEVC/H.265, MPEG-4 AVC/H.264 video encoding, with H.265's high compression ratio, it helps to save bandwidth up to 75%. In conclusion, its high integrated and cost effective design makes the device widely used in varieties of digital distribution systems such as cable TV digital head-end, digital TV broadcasting, and IPTV streaming etc.

Key features

- **4/8/12× HDMI input with 4/8/12 SPTS and 1 MPTS output through Data 1 and Data 2**
- **HEVC/H.265, MPEG4 AVC/H.264 video encoding format**
- **Support B frame GOP, high video compression ratio and stable bitrate**
- **MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough audio encoding format.**

- 1 ASI output (optional) as copy of MPTS
- IP output over UDP and RTP/RTSP protocol
- **Support QR code, LOGO, closed caption insertion.**
- Support “Null PKT Filter” function
- Support PID Remapping/ PCR accurate adjusting
- Control via web management, and easy updates via web

Principle Chart of Per Module



Technical Specification

Input	4/8/12×HDMI(1.4) input for option, HDCP 1.4	
Video Encoding	Encoding Format	HEVC/ H.265 , MPEG 4 AVC/H.264
	Resolution	Input: 1920×1080_60P, 1920×1080_50P, 1920×1080_59.94P, 1920×1080_60i, 1920×1080_50i, 1920×1080_59.94i, 1280×720_60P, 1280×720_59.94P, 1280×720_50P
		Output: 1920×1080_60P , 1920×1080_50P, 1920×1080_30P, 1920×1080_25P, 1280×720_60P, 1280×720_50P
	Chroma	4:2:0
	Bitrate	1Mbps~15Mbps (each channel)
	Rate Control	CBR/VBR
	GOP Structure	IBP, IBBP, IBBBBP, IPPP
	Advanced Pretreatment	Noise reduction
	Encoding Format	MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough (optional)
	Sampling rate	48KHz

Audio Encoding	Bit-rate (each channel)	48Kbps~384Kbps (MPEG-1 Layer 2 & LC-AAC) 24 Kbps~128 Kbps (HE-AAC) 18 Kbps~56 Kbps (HE-AAC V2)
Stream output (per module)	1 MPTS and 4 SPTS output over UDP/RTP/RTSP, Base-T Ethernet interface (1000M/100M self-adaption) (unicast/ multicast), IP null packet filter	
System	Web based management	
	Chinese-English control interface	
	Ethernet software upgrade	
Miscellaneous	Dimension (W× L× H)	482mm×328mm×44mm
	Approx weight	5kg
	Temperature	0~45°C(work), -20~80°C (Storage)
	Power	AC 100V-220V±10%, 50/60Hz

OSD (Logo/ Caption/QR Code) Insertion

LOGO Insertion



- Support jpg/jpeg/bmp/gif/png file
- Support multi pictures compressed into a zip file and display pictures in a dynamic way
- Custom time table of appear and disappear
- Custom transparency
- Drag to move to any position




Transparent background (hollow out) with png/gif type picture

White background with jpg/jpeg/bmp type picture

Caption Insertion

- Multi languages: Chinese, English, Thai, Arabic, Indian, Korean, Japanese...
- Custom font family/ color/size/weight 
- Custom running speed 
- Custom showing period and text length
- Custom background, transparency or any color
- Custom time table of appear and disappear
- Drag to move to any position

QR Code Insertion

- Input URL and create immediately
- Support add text at top or bottom
- Custom transparency/ size: 40*40 -- 400*400
- Support add logo at the center 
- Custom time table of appear and disappear
- Drag to move to any position

Technical Comparison

		HP8224V-HDMI	HP8224V-SDI	HP8224H	HP8224HV	HP8224HS
Input Interface		4/8/12*HDMI	4/8/12*SDI	4/8/12*HDMI		4/8/12*HDMI
Video Encoding		H.265, H.264	H.265, H.264	H.265, H.264	H.265	H.265,H.264
Audio Encoding		MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough				
Input Resolution	H.265	3840x2160P@30*2CHs 1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs 1920x1080I@50/60*4CHs	1920x1080P@50/60*4CHs 1920x1080I@50/60*4CHs 1280x720P@50/60*4CHs (HP8224HV only supports H.265)		1920x1080P@50/60*4CHs 1920x1080I@50/60*4CHs 1280x720P@50/60*4CHs
	H.264	3840x2160P@30*1CH 1920x1080P@50/60*2CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*2CHs 1920x1080I@50/60*2CHs 1280x720P@50/60*4CHs			
Output Resolution	H.265	Same as input resolution	1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs		1920x1080P@50/60*4CHs 1920x1080P@25/30*4CHs
	H.264		1920x1080P@50/60*2CHs 1280x720P@50/60*4CHs	(HP8224HV only supports H.265)		1280x720P@50/60*4CHs
OSD		N/A	N/A	Optional as per order		Support
Caption Language		N/A	N/A	Not support caption		Support multi languages
Note: “CH” means encoding channel, different encoding format can encode different channel with different resolution.						