



HPS856IV

H.265 Encoder Modulator



Product Overview

HPS856IV Encoder Modulator is Catcast's professional high integration device which includes encoding, multiplexing, and modulation. It supports 4/8/12/16/20/24 HDMI input, HEVC/H.265 & MPEG-4 AVC/H.264 encoding, 4/8/12/16 DVB-C/S2/T tuner input, 2 ASI input and 128 IP input, It also supports DVB-C/DVB-T/ATSC/ISDB-T RF out with 4/8 adjacent carries, IP output (128 SPTS and 4 MPTS output), ASI output.

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, IPTV live streaming multicast, digital TV broadcasting etc.

Key Features

- Support QR code, LOGO, OSD insertion for every local channel
- 4/8/12/16/20/24 HDMI input, support HDCP
- 4/8/12/16 DVB-C/S2/T tuner input for remux (optional)
- Support HEVC/H.265, MPEG-4 AVC/H.264 video encoding
- Support MPEG-1 Layer2, LC-AAC, HE-AAC v1&v2, AC3 audio encoding
- 1000 trillion IP input over UDP and RTP protocol, and IP output over UDP and RTP protocol (MPTS/SPTS, multicast/unicast)
- RF output (DVB-C、DVB-T、ATSC、ISDB-T modulation optional)
- 4/8/12/16 HDMI input, 4 carrier RF output
- 20/24 HDMI input, 8 carrier RF output
- 2 ASI input
- 2 ASI Independent output (optional) as copy of 4 MPTS
- Support “Null PKT Filter” function
- Support PID Remapping/ PCR accurate adjusting
- PID pass
- LCD, key function, Web-NMS management

Technical Specification

Input	4/8/12/16/20/24 HDMI, support HDCP
	4/8/12/16 DVB-C/S2/T tuner input for remux (optional)
	128 IP input over UDP, 1000M
	2 ASI input
Output	4/8 carriers RF output (DVB-C/DVB-T/ATSC/ISDBT)
	2 ASI output
	IP output (128 SPTS and 4 MPTS) UDP and RTP protocol unicast and multicast

Video	Encoding	HEVC/H.265, MPEG-4 AVC/H.264		
	Resolution	Input:1920×1080_60P, 1920×1080_60i, 1920×1080_50P, 1920×1080_50i, 1280×720_60P, 1280×720_50P, 720×576_50i,720×480_60i,		
		Output:1920×1080_60P, 1920×1080_50P, 1280×720_60P, 1280×720_50P, 720×576_50P,720×480_60P, 1920×1080_30P,1920×1080_25P, 1280×720_30P,1280×720_25P, 720x576_25P,720x480_30P		
	Bit-rate	1Mbps~13Mbps (each channel)		
Rate Control	CBR			
Audio	Encoding	MPEG-1 Layer 2, LC-AAC, HE-AAC v1&v2, AC3		
	Sampling rate	48Khz		
	Bit-rate	64kbps,128Kbps,192kbps,224kbps,256kbps,320kbps,384kbps		
	Resolution	24-bit		
	Audio Gain	0-255 Adjustable		
Multiplexing	Maximum PID Remapping	180 output PIDs per channel		
	Function	PID remapping (automatically or manually) Accurate PCR adjusting		
Modulator	DVB-T	RF number	4/8*RF COFDM DVB-T out (4/8 carriers combined output)	
		Standard	EN300744	
		FFT mode	2K	
		bandwidth	6M, 7M, 8M	
		Constellation	QPSK, 16QAM, 64QAM	
		Guard Interval	1/4, 1/8, 1/16, 1/32	
		FEC	1/2, 2/3, 3/4, 5/6, 7/8	
		MER	≥42 dB	
		RF frequency	50~960MHz, 1KHz step	
		RF output level	-34~ -10 dBm, 0.1db step	
	DVB-C	RF number	4/8*RF DVB-C out (4/8 carriers combined output)	
		Standard	EN300 429/ITU-T J.83A/B/C	
		MER	≥42db	
		RF frequency	50~960MHz, 1KHz step	
		RF output level	-34~-10dBm , 0.1dBm step	
		Symbol Rate	5.0Msps~7.0Msps, 1ksps stepd	
			J.83A	J.83B/J.83C
		Constellation	16/32/64/128/256	64/256 QAM

			QAM	
		Bandwidth	8M	6M
	ATSC	RF number	4/8*RF ATSC out (4/8 carriers combined output)	
		Standard	ATSC A/53	
		Bandwidth	6M	
		Constellation	8VSB	
		FEC	RS(208 188)+Trellis	
		MER	≥42dB	
		RF frequency	50~960MHz, 1KHz step	
		RF output level	-34~-10dBm , 0.1dBm step	
	ISDB-T	RF number	4/8*RF ISDB-T out (4/8 carriers combined output)	
		Standard	ARIB STD-B31	
		Bandwidth	6M	
		Constellation	QPSK, 16QAM, 64QAM	
		Guard Interval	1/32, 1/16, 1/8, 1/4	
		Transmission Mode	2K	
		Code rate	1/2, 2/3, 3/4, 5/6, 7/8	
		MER	≥42dB	
		RF frequency	50~960MHz, 1KHz step	
		RF output level	-34~-10dBm , 0.1dBm step	
System function	Network management(WEB)			
	Chinese and English language			
	Ethernet software upgrade			
Miscellaneous	Dimension (W×L×H)	482mm×480mm×45mm		
	Weight	9.5kg		
	Environment	0~45℃(work); -20~80℃(storage)		
	Power requirements	AC100~240V, 50/60Hz		