



HPS846IV

H.264 Encoder Modulator



Product Overview

HPS846IV Encoder Modulator is Catcast's professional high integration device which includes encoding, multiplexing, and modulation. It supports 8/12/16/20/24 HDMI input, MPEG-4 AVC/H.264 encoding, 2 ASI input and 128 IP input, It supports DVB-C/DVB-T/ATSC/ISDB-T/DTMB RF output with 4/8/16 non-adjacent carriers, IP output (128 SPTS and 4 MPTS output), and 2 ASI output at the same time.

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
- 4/8/16 non-adjacent carriers RF DVB-C/DVB-T/ATSC/ISDB-T/DTMB output (optional)
- Support MPEG-4 AVC/H.264 video encoding
- Support MPEG-1 Layer2, LC-AAC, HE-AAC v1&v2 audio encoding
- 1000M IP input over UDP protocol, for remux
- 2 ASI input for remux
- IP output over UDP/RTP/RTSP protocol, unicast/multicast
- RF output (DVB-C/DVB-T/ATSC/ISDB-T/DTMB modulation optional)
- 2 ASI independent output 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	8/12/16/20/24 HDMI, support HDCP	
	4/8 DVB-C/DVB-S2/DVB-T/T2 tuner input for remux (optional)	
	128 IP input over UDP,1000M	
	2 ASI input	
Output	4/8/16 carriers RF output (DVB-C/DVB-T/ATSC/ISDBT/DTMB)	
	2 ASI output	
	IP output (128 SPTS and 4 MPTS)	
	UDP/RTP/RTSP protocol Support unicast and multicast	
Video	Encoding	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			
	Sampling rate	44.1KHz and 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	4/8/16*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	4/8/16/32*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 QAM	64/256 QAM	
	Bandwidth	8M	6M		
	ATSC	RF number	4/8/16*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	4/8/16*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-NMS)			
	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		