



HPS866IV

H.264 Encoder Modulator



Product Overview

HPS866IV 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, MPEG-4 AVC/H.264 encoding, 4/8/12/16 DVB-C/S2/T/T2 tuner input, 2 ASI input and 128 IP input, It supports DVB-C/DVB-T/ATSC/ISDB-T/DTMB RF output with 16/32 adjacent carries, 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
- 4/8/12/16 DVB-C/S2/T/T2 tuner input for remux
- 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
- 4/8/12/16/20/24 HDMI +ASI+IP mixed input, 16 carrier RF output
- 8 HDMI + 16 tuner+ ASI+IP mixed input, 16 carrier RF output
- 16 HDMI +8 tuner+ ASI+ IP mixed input, 16 carrier RF output
- IP output over UDP/RTP/RTSP protocol, unicast/multicast
- 16 carriers 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	4/8/12/16/20/24 HDMI, support HDCP	
	4/8/12/16 tuner (DVB-C/DVB-S2/DVB-T/T2 optional)input for remux optional	
	128 IP input over UDP,1000M	
	2 ASI input	
Output	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	16*RF COFDM DVB-T out (16 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	16/32*RF DVB-C out (16/32 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	16*RF ATSC out (16 carriers combined output)	

		Standard	ATSC A/53
		Bandwidth	6M
		Constellation	8VSB
		FEC	RS(208 188)+Trellis
		MER	$\geq 42\text{dB}$
		RF frequency	50~960MHz, 1KHz step
		RF output level	-34~-10dBm , 0.1dBm step
	ISDB-T	RF number	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	$\geq 42\text{dB}$
		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	