



HPR8401LM

Encoder Modulator



Product Overview

HPR8401LM Encoder Modulator is Catcast's professional high integration device which includes encoding, multiplexing, and modulation. It supports 4/8 HDMI input, IP input, MPEG-4 AVC/H.264 encoding, 4 carriers of RF output (DVB-C、DVB-T、ATSC、ISDB-T DTMB optional), IP (MPTS&SPTS) 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, digital TV broadcasting

Key Features

- 4/8 HDMI input, MPEG-4 AVC/H.264 Video encoding
- ASI input/output (optional)
- LCD screen (optional)
- IP (SPTS/MPTS) input over UDP
- IP output over UDP and RTP protocol, support unicast and multicast
- 4 channels HDMI input version, 4 carrier RF output,
8 channels HDMI input version, 4 carrier RF output
(DVB-C、 DVB-T、 ATSC、 ISDB-T 、 DTMB optional)
- 1 ASI input for re-multiplexing (optional)
- 2 ASI Independent output as copy of MPTS (optional)
- Support “Null PKT Filter” function
- Support PID Remapping/ PCR accurate adjusting
- PID pass
- LCD、 key function
- Control via web management, and easy updates via web

Technical Specification

Input	4/8 HDMI, support HDCP
	IP input over UDP
Output	4 carriers RF output (DVB-C/DVB-T/ATSC/ISDBT/DMBT optional)
	1 ASI output (optional)

	IP output (4/8 SPTS and 1MPTS) UDP and RTP 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 carrier RF 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 carrier RF output
		Standard	EN300 429/ITU-T J.83A/B/C
		MER	≥40db
		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 carrier RF output		
	Standard	ATSC A/53		
	Bandwidth	6M		
	Constellation	8VSB		
	FEC	RS(208 188)+Trellis		
	MER	≥40dB		
	RF frequency	50~960MHz, 1KHz step		
	RF output level	-34~-10dBm , 0.1dBm step		
ISDBT	RF number	4 carrier RF 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	≥40dB		
	RF frequency	50~960MHz, 1KHz step		
	RF output level	-34~-10dBm , 0.1dBm step		
DTMB	RF number	4 carrier RF output		
	Standard	DTMB GB20600-2006		
	Bandwidth	8M bandwidth		
	Constellation	4QAM,16QAM, 32QAM, 64QAM		
	Qty. of modulation carriers	single carrier or multi-carriers		
	Guard intervals	PN420, PN595, PN945		
	Internal error correction code	LDPC		
	Encoding efficiency	0.4, 0.6, 0.8		
	Interlace depth	240, 720		
	MER	≥42dB		
	ACLR	55dB		
	Frequency range	110 ~ 960MHz, in 1KHz steps		
	RF out level	-26dBm ~ -10dBm, in 0.5dB steps		
System function	Network management(WEB)			
	Chinese and English language			

	Ethernet software upgrade	
Miscellaneous	Dimension (W×L×H)	440mm×270mm×40mm
	weight	5kg
	Environment	0~45°C(work); -20~80°C(storage)
	Power requirements	AC100~240V, 50/60Hz

Principle Chart

