



HPS946IV

Encoder Modulator



Product Overview

HPS946IV Encoder Modulator is Catcast's professional high integration device which includes HDMI encoding, Tuner demodulation, multiplexing, and modulation all functions. It converts HDMI/Tuner/ASI/IP signals to digital RF, ASI, IP output.

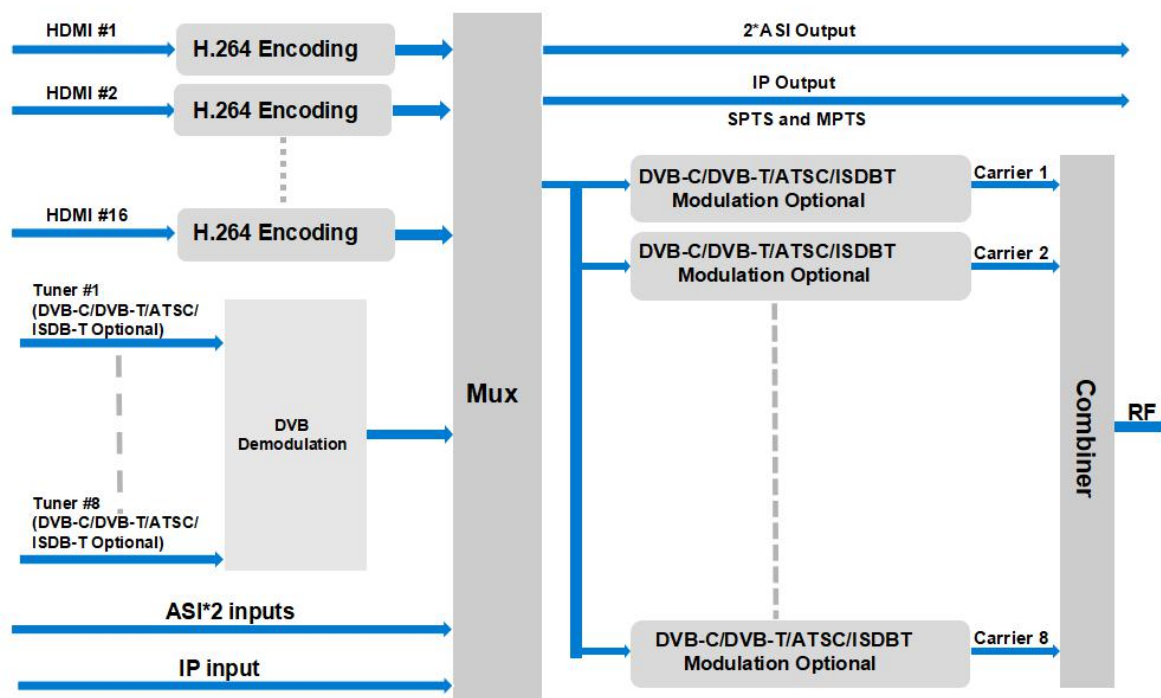
It supports 4/8/12/16/20/24 HDMI input, 4/8/12/16/20/24 tuner (DVB-C/DVB-S2/DVB-T/T2/ATSC/ISDB-T optional) input, or HDMI + tuner combined input, MPEG-4 AVC/H.264 Encoding for HDMI input, 1000M IP input, 2 ASI input, Multiplexing, Modulation, 4/8 carriers DVB-C/DVB-T/ATSC/ISDB-T RF output, 1000M IP output (SPTS and MPTS 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 headend, IPTV streaming, digital TV broadcasting etc.

Key Features

- 4/8/12/16/20/24 HDMI input, support HDCP
- 4/8/12/16/20/24 tuner input
- Support different types of tuner (DVB-S/S2、 DVB-C、 DVB-T/T2、 ATSC、 ISDBT, etc.) input, or mixed use (e.g., 4 - way DVB-C and 4 - way DVB-S2 input at the same time, making up 8 - way input)
- Support MPEG-4 AVC/H.264 video encoding for HDMI input
- Support MPEG-1 Layer2, LC-AAC, HE-AAC v1&v2 audio encoding for HDMI input
- 1000M IP input over UDP/RTP/RTSP protocol, 2 ASI input
- 1000M IP output over UDP/RTP/RTSP protocol (MPTS and SPTS)
- 8/12/16 tuner + 4/8 HDMI mixed input,
- 8/12/16 HDMI + 4/8 tuner mixed input,
- 20/24 HDMI input,
- 20/24 tuner input,
- 4/8 carrier RF output (DVB-C/DVB-T/ATSC/ISDB-T optional)
- 2 ASI Independent output as copy of MPTS
- Support “Null PKT Filter” function
- Support PID Remapping/ PCR accurate adjusting
- LCD、 key function
- Control via web management, and easy updates via web

Principle Chart



Specification

Input	4/8/12/16/20/24 HDMI optional	
	4/8/12/16/20/24 tuner optional (DVB-S/S2、DVB-C、DVB-T/T2、ATSC、ISDBT, etc.) input, or mixed use (e.g., 4-way DVB-C and 4-way DVB-S2 input at the same time, making up 8-way input)	
	2 ASI input, 1000M IP input	
Output	4/8 carriers RF output (DVB-C/DVB-T/ATSC/ISDBT/DMBT optional)	
	2 ASI output	
	1000M IP output (SPTS and 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 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	4/8 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	4/8 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	4/8 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
		System function	Network management(WEB)
Chinese and English language			
Ethernet software upgrade			
Miscellaneous	Dimension (W×L×H)	482mm×480mm×45mm	
	Environment	0~45°C(work); -20~80°C(storage)	
	Power requirements	AC100~240V, 50/60Hz	

If you don't need RF output, you can order HP924LX IP Gateway

