



HPM304

IP to 4 DVB-T Modulator



Product Overview

HPM304 IP to 4 DVB-T Modulator is professional high integration device which includes multiplexing and modulation functions. It supports 1000M IP input, 4 carriers DVB-T/DVB-C/ATSC/ISDBT modulated RF output, 4 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 head-end, digital TV broadcasting.

Key Features

- **1000M IP input, UDP protocol, support unicast/multicast**
- **4 carriers RF (DVB-T/DVB-C/ATSC/ISDBT optional) output,**
- **Support “Null PKT Filter” function**

- Support PID Remapping/ PCR accurate adjusting, PID pass
- Control via web management, and easy updates via web

Technical Specification

Input	IP input, 1GE data port, 1000M ethernet port UDP protocol, unicast/multicast			
Output	4 carriers DVB-T RF output , (DVB-T ATSC, DVB-C, ISDB-T, DTMB) optional			
	IP output : 4 MPTS IP output over UDP and RTP protocol			
Multiplexing	Maximum PID Remapping	180 output pids per channel		
	Function	PID remapping (automatically or manually)		
		Accurate PCR adjusting		
Modulation	DVB-T	RF number	4 RF DVB-T 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	
		RFoutput level	-34~ -10 dBm, 0.1db step	
	DVB-C	RF number	4 RF DVB-C output	
		Standard	EN300 429/ITU-T J.83A/B/C	
		MER	≥42db	
		RF frequency	50~960MHz, 1KHz step	
		RFoutput level	-34~-10dBm , 0.1dBm step	
		Symbol Rate	5.0Msps~7.0Msps,1ksps stepd	
			J.83A	J.83B/J.83C
		Constellation	16/32/64/128/256Q AM	64/256 QAM
		Bandwidth	8M	6M
	ATSC	RF number	4 RF ATSC output	
		Standard	ATSC A/53	
		Bandwidth	6M	
		Constellation	8VSB	
		FEC	RS(208 188)+Trellis	
		MER	≥42dB	
		RF frequency	50~960MHz, 1KHz step	

		RFoutput level	-34~-10dBm , 0.1dBm step
	ISDB-T	RF number	4 RF ISDB-T 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
			RFoutput level
	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
		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)	482mm*360mm*44mm	
	weight	5kg	
	Environment	0~45°C(work); -20~80°C(storage)	
	Power requirements	AC100~240V, 50/60Hz	