









Product Overview

HPR3624M Tuner to Modulator is professional high integration device which includes tuner demodulation, multiplexing and modulation. It supports 4/8/ 12/ 16/20/24 tuner input , support different types of tuner (DVB-S/S2 、 DVB-S/S2/S2X 、 DVB-C 、 DVB-T/T2 、 ATSC 、 ISDBT) input, IP input, 2 ASI input, 2 ASI output, IP output, 4/8/16/24 carriers modulated RF output (DVB-T/ATSC/ISDBT/DTMB optional). or 4/8/16/32 carriers DVB-C modulated RF output. It supports Biss descrambling function. 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, IPTV live broadcasting etc.

Key Features

- 👉 **4/8/12/16/20/24 tuner input; support Biss descrambling function**
(DVB-S/S2, DVB-S/S2/S2X, DVB-C, DVB-T/T2, ATSC, ISDBT tuner) optional
- 👉 **Support different types of tuner (DVB-S/S2、 DVB-S/S2/S2X、 DVB-C、 DVB-T/T2 、 ATSC、 ISDBT) input, or mixed use (for example: 4 DVB-S/S2 and 4 DVB-T/T2 tuner input at the same time, making up 8 tuners input)**
- 👉 **IP input, 128 SPTS or MPTS, UDP unicast or multicast, 1000M Ethernet port for re-multiplexing and modulation**
- 👉 **2 ASI input, for re-multiplexing and modulation**
- 👉 **IP output 128 SPTS or 8 MPTS , UDP unicast/multicast, 1000M Ethernet port**

-  4/8/16/24 carriers modulated RF output (DVB-T/ATSC/ISDBT/DTMB optional)
-  4/8/16/32 carriers modulated RF DVB-C output , 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
-  Control via web management (Web-NMS), and easy updates via web

Specifications

DVB-S/S2 tuner	Demodulation Standard	DVB-S compliant DVB-S2 compliant VCM and ACM supported
	Maximum Symbol Rate (DVB-S2)	Normal FEC Frame : 64800 bits Symbol Rates: QPSK 1- 60 MSps 8APSK 1-60MSps 16APSK 1-58 MSps 32APSK 1-55 MSps
	Maximum Symbol Rate (DVB-S)	Symbol Rates:1-54 MSps
	Half SyQuest Baseband filler (Roll off factor)	0.35 for DVB-S 0.15 to 0.35 for DVB-S2
	Code Rate	*DVB-S : OPSK:1/2, 2/3, 3/4, 4/5, 5/6, 7/8 *DVB-S2: OPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10
	BISS Descrambling	Mode 1, Mode E
	DiSeqC	DiSeqC 2.0 compliant
DVB-S/S2/S2X tuner	Demodulation Standard	DVB-S compliant DVB-S2/S2X compliant VCM and ACM supported
	Maximum Symbol Rate(DVB-S2/S2X)	Normal FEC Frame : 64800 bits Symbol Rates: QPSK 1- 60 MSps 16APSK 1-58 MSps 32APSK 1-55 MSps 64APSK 1-34 MSps
	Maximum Symbol Rate(DVB-S)	Symbol Rates:1-54 MSps
	Half SyQuest Baseband filler (Roll off factor)	0.35 for DVB-S 0.15 to 0.35 for DVB-S2 0.05 to 0.35 for DVB-S2X
	Code Rate	*DVB-S : OPSK:1/2, 2/3, 3/4, 4/5, 5/6, 7/8 *DVB-S2:

		OPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10 *DVB-S2X: 64APSK: 11/15, 7/9, 4/5, 5/6		
	BISS Descrambling	Mode 1, Mode E		
	DisEqC	DiSEqC 2.0 compliant		
DVB-T/T2 tuner	Frequency	50~960MHz		
	Bandwidth	6/7/8 M bandwidth		
DVB-C tuner	Standard	J.83A(DVB-C), J.83B, J.83C		
	Frequency	50~960MHZ		
	Constellation	16/32/64/128/256 QAM		
ISDB-T tuner	Frequency	50~960MHZ		
ATSC tuner	Frequency	50~960MHZ		
	Bandwidth	6M bandwidth		
	Constellation	8VSB		
Input	4/8/12/16/20/24 tuner, (DVB-S/S2, DVB-S/S2/S2X,DVB-C,DVB-T/T2,ATSC,ISDBT optional)			
	2 ASI, DVB standard, BNC connector			
	IP SPTS/MPTS, UDP unicast/multicast, 1000M ethernet port			
Output	2 ASI output (optional)			
	IP output (128 SPTS or 8 MPTS) UDP and RTP protocol, UDP unicast/multicast, 1000M ethernet port			
	4/8/16/24 carriers modulated RF output,(DVB-T/ATSC/ISDBT/DTMB optional)			
	4/8/16/32 carriers modulated DVB-C RF output, optional			
Multiplexing	Maximum PID Remapping	180 output pids per channel		
	Function	PID remapping (automatically or manually)		
		Accurate PCR adjusting		
Modulation	DVB-T	RF number	4/8/16/24 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	
	RF output level	-34~ -10 dBm, 0.1db step		
	DVB-C	RF number	4/8/16/32 RF DVB-C 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 step	
		Standard	J.83A	J.83B/J.83C
		Constellation	16/32/64/128/256 QAM	64/256 QAM
		Bandwidth	8M	6M
	ATSC	RF number	4/8/16/24 RF ATSC output	
		Standard	ATSC A/53	
		Bandwidth	6M	
		Constellation	8VSB	
		FEC	RS(208 188)+Trellis	
		MER	≥42dB	
		RF frequency	50~960MHz, 1KHz step	

	ISDB-T	RF output level	-34~-10dBm , 0.1dBm step
		RF number	4/8/16/24 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
		RF output level	-34~-10dBm , 0.1dBm step
	DTMB	RF number	4/8/16/24 RF DTMB 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 output level	-26dBm ~ -10dBm, in 0.5dB steps		
System function	Network management(Web-NMS)		
	Chinese and English language		
	Ethernet software upgrade		
Miscellaneous	Dimension (W×L×H)	482mm×480mm×45mm	
	Weight	6-9kg	
	Environment	0~45℃(work); -20~80℃(storage)	
	Power requirements	AC100~240V, 50/60Hz	