

HP8544D 4 in 1 DVB-T Modulator



Outline

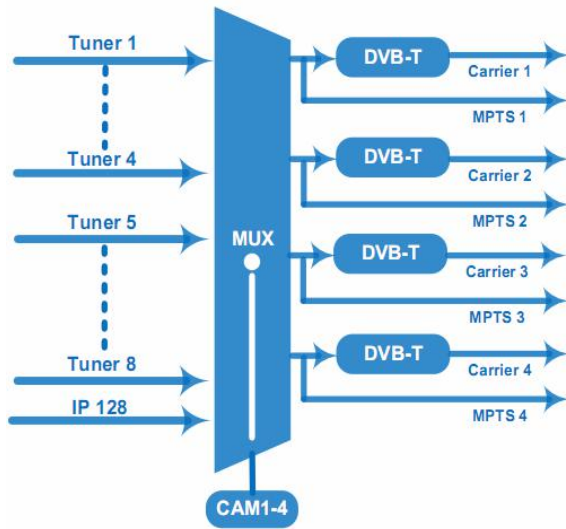
HP8544D is a high performance and cost-effective DVB-T modulator designed by Catcast. It has 8 tuner inputs. After multiplexing and modulating process, it gives 4 DVB-T non-adjacent carriers output through one RF port. To meet customers' various requirements, this device is also equipped with data port for IP input and output over UDP and RTP. Its pluggable structure design greatly facilitates the change of modules as needed. Moreover, the four CAMs/CIs accompanied and BISS modules can descramble the input programs from 8 Tuners and IP.

HP8544D can be upgraded and controlled through network system, which allows it widely used in digital broadcasting network and provide good signals for scientific laboratory and DVB-T STB.

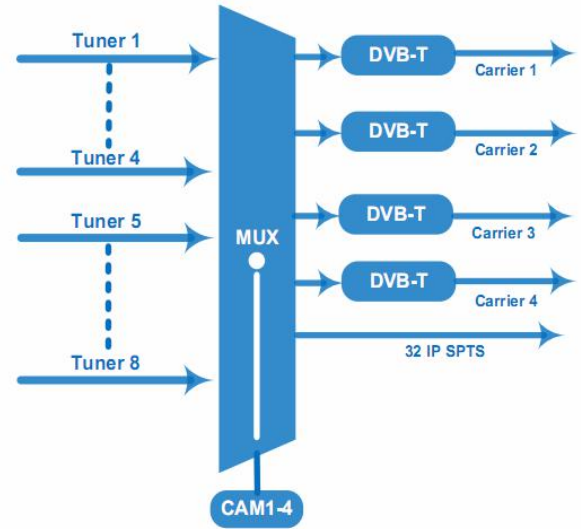
Features

- * **4 Tuner (DVB-C/T/(T)/S/S2/S2X/ISDBT optional) + 4 Tuner with CAM (DVB-C/T/(T)/S/S2/S2X/ATSC/ISDBT optional)**
- * **Demodulation Module (4*RF/Loop out + 4*CAM + 4*Smartcard)**
- * **One CAM can decrypt multiple programs from Tuners and IP**
- * **Maximum 128 IP input (MPTS/SPTS) over UDP and RTP protocol**
- * **4 groups multiplexing +4 groups DVB-T modulating**
- * **128 IP input, 4 IP MPTS output (Version 1); Or: 32 SPTS IP out, without IP input or MPTS output (Version 2)**
- * **Support BISS descrambling**
- * **Support accurate PCR adjusting, PID Remapping, PSI/SI rebuilding and editing, A/V PID filtering**
- * **Web-based NMS management**

Principle Chart



Version 1



Version 2

Specifications

Input	4 Tuner (DVB-C/T/(T)/S/S2/S2X/ISDBT optional) + 4 Tuner with CAM (DVB-C/T/(T)/S/S2/S2X/ATSC/ISDBT optional); 128 IP (SPTS/MPTS) input over UDP and RTP, RJ45, 1000M/100M, Unicast/Multicast (IP input is for Version 1 only)				
Tuner Section	Multi-mode tuners switchable (New)	DVB-C	Input Frequency	60 ~890 MHz	
			Standard	J.83A, J.83C	J.83B
			Constellation	16/32/64/128/256 QAM	64/256 QAM
		DVB-T/(T)	Input Frequency	60 ~890 MHz	
			Bandwidth	6/7/8 M	
			ISDB-T	Input Frequency 60 ~890 MHz	
	DVB-S/S2 Tuner	DVB-S	Input Frequency	950~150MHz	
			Symbol rate	0.5~45MspS	
			Signal Strength	-65~-25dBm	
		DVB-S2	FEC Demodulation	1/2, 2/3, 3/4, 5/6, 7/8 QPSK	
			Input Frequency	950~2150MHz	
			Symbol rate	QPSK: 1~45 MspS; 8PSK: 0.5~45MspS	
DVB-S/S2/S2X Tuner (New)	DVB-S	Code rate	1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10		
		Constellation	QPSK, 8PSK		
		Input Frequency	950~2150MHz		
		Symbol rate	0.5~45MspS		
		Signal Strength	- 65- -25dBm		
		FEC	1/2, 2/3, 3/4, 5/6, 7/8		

		DVB-S2	Constellation	QPSK
			Max input bitrate	≤129 Mbps
			Input Frequency	950~2150MHz
			Symbol rate	QPSK/8PSK /16APSK: 0.5~45 Msps 32APSK: 0.5~40Msps;
			FEC	QPSK: 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
			Constellation	QPSK, 8PSK, 16APSK, 32APSK
		Max input bitrate	≤129 Mbps	
		DVB-S2X	Input Frequency	950~2150MHz
			Symbol rate	QPSK/8PSK /16APSK: 0.5~45 Msps 8APSK: 0.5~40Msps 32APSK: 0.5~40Msps
			FEC	QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 8APSK: 5/9-L, 26/45-L 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 1/2-L, 8/15-L, 5/9-L, 26/45, 3/5, 3/5-L, 28/45, 23/36, 2/3-L, 25/36, 13/18, 7/9, 77/90 32APSK: 3/4, 4/5, 5/6, 8/9, 2/3-L, 32/45, 11/15, 7/9
			Constellation	QPSK, 8PSK, 8APSK, 16APSK, 32APSK
			Max input bitrate	≤129 Mbps
			Input Frequency	54~858MHz
		ATSC-T	Bandwidth	6M
Descrambling	CAM/CI	4 sets		
BISS Descrambling	Mode 1, Mode E (descramble individual program)			
Multiplexing	Maximum PID Remapping	256 per input channel		
	Function	A/V PID filtering		
		PID Remapping		
		Accurate PCR adjusting		
		Generate PSI/SI table automatically		
Modulation	DVB-T	Standard	EN300744	
		FFT mode	2K	

		Bandwidth	6M, 7M, 8M
		Constellation	QPSK, 16QAM, 64QAM
		Guard Interval	1/4, 1/8, 1/16, 1/32
		Code Rate	1/2, 2/3, 3/4, 5/6, 7/8
		MER	≥42 dB
		RF frequency	50~960MHz, 1KHz step
		RF out	4*DVB-T non-adjacent carriers combined output, 40M total bandwidth limitation
		RF output level	-28~ -3 dBm (79~104 dbμV), 0.1db step
Stream out	UDP and RTP protocol (RJ45, 1000M/100M Unicast/Multicast) 4*MPTS out --- Version 1 ; 32*SPTS out ---Version 2		
System	Web-based NMS support Ethernet software upgrading		
General	Dimension	482mm×300mm×44.5mm (W*D*H)	
	Temperature	0~45°C(Operation) ; -20~80°C(Storage)	
	Power	AC 100V±10%/50/60Hz; AC 220V±10%, 50/60HZ	

Order Guide

	Version 1	Version 2
IP input	128 SPTS/MPTS input	N/A
IP output	4 MPTS output	32 SPTS output