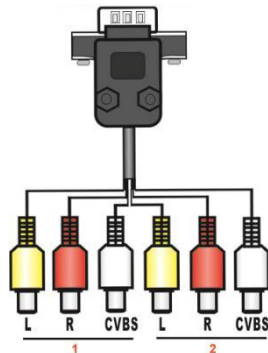


# HPS8544A SD Encoder Modulator

24 CVBS → 16\* DVB-C/8\*DVB-T Digital RF



*\*12=24 Channels*

## Product Overview

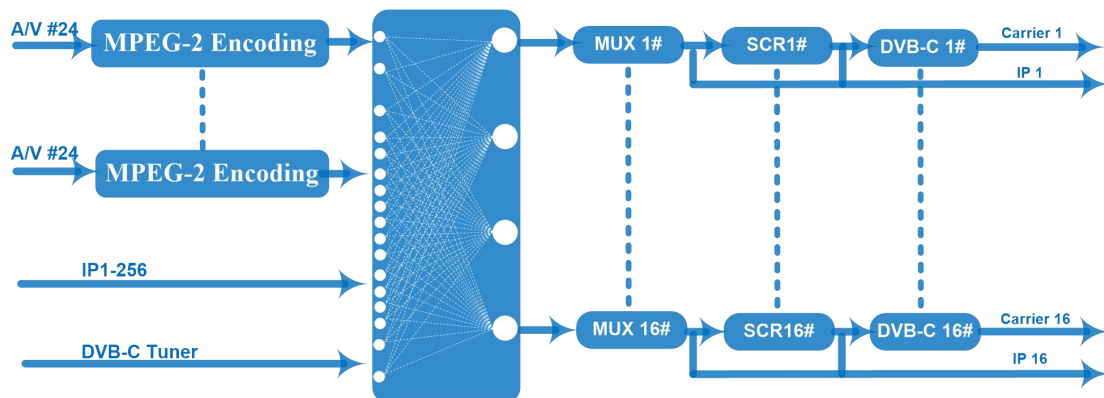
HPS8544A SD encoder modulator is a professional high integration device which includes encoding, multiplexing, scrambling and modulation. It supports 24 CVBS inputs with MPEG-2 video encoding and MPEG-1 Layer 2, DD AC3 (2.0) audio encoding and one DVB-C (ATSC optional) tuner input and 256 IP input through Data1 (GE) port. It also supports DVB-C RF out with 16 non-adjacent carries or DVB-T RF out with 8 non-adjacent carriers and supports 16 MPTS as mirror of 16 carriers or 8 MPTS as mirror of 8 carriers through Data2 (GE) output port. This full function device makes it ideal for small CATV head end system, and it's a smart choice for hotel TV system, entertainment system in sports bar, hospital, apartment...

## Key features

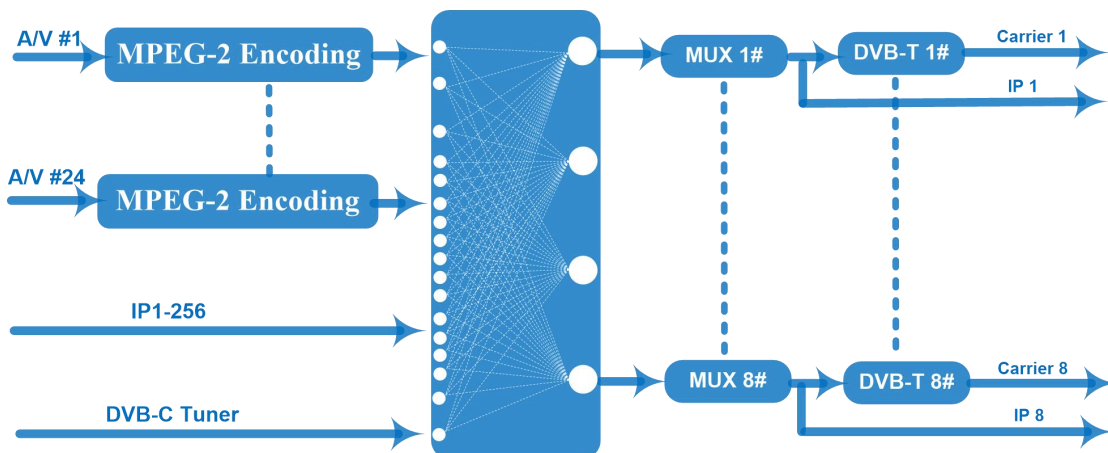
- 24 CVBS inputs with MPEG-2 Encoding

- 1DVB-C(ATSC optional) tuner input for re-mux
- 256 IP(DATA1 port only) input over UDP and RTP protocol
- Support MPEG-1 Layer 2, DD AC3 (2.0) audio encoding
- Support CC (closed caption)
- Support 16 groups multiplexing/Scrambling/DVB-C modulating
- **Support 8 groups multiplexing/DVB-T modulating---Optional**
- Support 16 MPTS IP (DATA2 port only) output over UDP, RTP/RTSP
- **Support 8 MPTS IP (DATA2 port only) output over UDP, RTP/RTSP--only for DVB-T RF out**
- **Support Logo, Caption, QR Code insertion**
- Support PID remapping/ accurate PCR adjusting/PSI/SI editing and inserting
- Control via web management, and easy updates via web
- Lowest cost per channel, breakthrough price

### Principle Chart



### DVB-C Principle Chart



### DVB-T Principle Chart

## Technical specification

<b>Input</b>	24 CVBS inputs 1 DVB-C(ATSC optional) Tuner for re-mux, F type interface 256 IP input over UDP and RTP, DATA1, RJ45			
<b>Video</b>	Resolution	720×480_60i, 544×480_60i, 352×480_60i 352×240_60i,320×240_60i,176×240_60i, 176×120_60i		
		720×576_50i,704×576_50i,640×576_50i, 352×288_50i 320×288_50i, 176×288_50i, 176×144_50i		
	Encoding	MPEG-2		
	Bit-rate	0.5Mbps~8Mbps per channel		
	Rate Control	CBR/VBR		
	GOP Structure	IP, IBP, IBBP, IBBBBP		
	Advanced Pretreatment	De-interlacing, noise reduction		
<b>Audio</b>	Encoding	MPEG-1 Layer 2, DD AC3 (2.0)		
	Sampling rate	48KHz		
	Resolution	24-bit		
	Bit-rate	64Kbps,128Kbps,192kbps,256kbps,320kbps,384kbps each channel		
<b>Multiplexing</b>	Maximum PID Remapping	256 input per channel		
	Function	PID remapping ( automatically or manually)		
		Accurate PCR adjusting		
Generate PSI/ SI table automatically				
<b>Scrambling</b>	Maximum simulcrypt CA	4		
	Standard	EN300 429/ITU-T J.83A/B		
	Connection	Local/remote connection		
<b>Modulation</b>	DVB-C	QAM Channel: 16 non-adjacent carriers output (maximum bandwidth 192MHz) Standard: EN300 429/ITU-T J.83A/B MER: ≥40db RF frequency: 50~960MHz, 1KHz step RF output level: -20~+10dbm (87~107 dbμV), 0.1db step Symbol Rate: 5.0Msps~7.0Msps, 1ksps stepping Constellation: 16/32/64/128/256QAM		
			J.83A	J.83B
		Constellation	16/32/64/128/256QAM	64/256 QAM
		Bandwidth	8M	6M
	DVB-T	Standard	EN300744	
		FFT mode	2K,4K, 8K	
		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 out	8 non-adjacent carriers DVB-T out (maximum bandwidth 192MHz)
		RF output level	-20~ +10 dBm (77~97 db $\mu$ V), 0.1db step
<b>Stream output</b>	RF output (F type interface)		
	16 MPTS output over UDP and RTP/RTSP as mirror of 16 DVB-C carriers, 8 MPTS output over UDP and RTP/RTSP as mirror of 8 DVB-T carriers (Optional)		
	1*1000M Base-T Ethernet interface		
<b>System function</b>	Network management (WEB)		
	Chinese and English language		
	Ethernet software upgrade		
<b>Miscellaneous</b>	Dimension (W×L×H)	482mm×440mm×44mm	
	Approx weight	8kg	
	Environment	0~45℃(work); -20~80℃ (Storage)	
	Power requirements	AC 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz	
	Power consumption	20W	