THOR BROADCAST

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H-24AV-QAM-IP

24 channel CVBS - Composite Analog Video/Audio to QAM Digital Modulator and IPTV Streamer

High Density Encoder Modulator with up to 24 inputs for CVBS video via an RCA connector. Robust 1RU system for building a whole headend in as little rack space as possible. This flexible chassis allows for outputting all of your inputs onto RF and IP simultaneously. This high density unit also allows for PID remapping automatically or manually with up to 180 PID's per channel. Utilizing only MPEG2 video with CBR and VBR means your CVBS input signals will benefit from noise reduction and de-interlacing to continuously provide your content in a fluid manner.

This unique encoder modulator also allows you to input up to 128 STPS streams for modulation onto RF; the multiplexing chassis will put these streams into your RF channel lineup for you which can also include a digital logo stamp on the streams. The Gigabit interface allows up to 4 MPTS streams output simultaneously. This full function device makes it ideal for small CATV head end system, and it's a smart choice for hotel CATV Headends, entertainment systems in sports bars, hospitals, and apartment complexes.

Applications:

- AV to RF - Coax distribution up to 24 Analog baseband video to modulated CATV QAM/8-VSB RF
- AV to IP - IPTV distribution up to 24 Analog baseband video to IPTV SMPT's TS's output
- RF to IP - 1 QAM RF input to IP output
- IP to RF - Up to 128 IP TS's input to modulated CATV QAM/8-VSB RF

Features

- 8/12/16/20/24 A/V CVBS inputs with MPEG2 Encoding - Modulated 4 RF output - and 4 MPTS's IP TS output
- MPEG1 Layer II, AC3(2.0) Audio encoding and supports audio gain adjustment
- 1QAM tuner input for re-mux (only for QAM RF out version. Suitable for India market.)
- 128 IP input over UDP and RTP protocol
- 4 groups of multiplexing/scrambling/modulation output channels
- PID remapping/ accurate PCR adjusting/PSI/SI editing and inserting
- 4 MPTS IP (DATA1 port only) output over UDP and RTP
- 4 QAM or DVB-T RF output
- CC (closed captions)
- Supports QR code, LOGO, OSD insertion
- Control via web management, and easy updates via web
- Lowest cost per channel, breakthrough price

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Specifications

Input	8/12/16/20/24 CVBS inputs , RCA interface 1 QAM Tuner for remux, F type interface (only for QAM RF out) 128 IP input over UDP and RTP, DATA1 and DATA2, RJ45	
Video	Resolution - 480i / 480p	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 each channel
	Rate Control	CBR, VBR
	GOP Structure	GOP_0_B, GOP_1_B, GOP_2_B, GOP_3_B
	Advanced Pretreatment	De-interlacing, noise reduction
Audio	Encoding	MPEG-1 Layer 2, AC3 (2.0)
	Sampling rate	48KHz
	Resolution	24-bit
	Bit-rate	64Kbps,128Kbps,192kbps,256kbps,320kbps,384kbps each channel
Multiplexing	Maximum PID Remapping	180 inputs per channel
	Function	PID remapping (automatically or manually)
		Accurate PCR adjusting
		Generate PSI/SI table automatically
Scrambling (Only for QAM RF out)	Maximum simulcrypt CA	4
	Standard	ETR289, ETSI 101 197, ETSI 103 197
	Connection	Local/remote connection

Modulation	QAM	RF out	4x RF QAM out	
		Standard	EN300 429/ITU-T J.83A/B	
		MER	≥40db	
		RF frequency	50~960MHz, 1KHz step	
		RF output level	-25 ~ -1dbm, 0.1db step	
		Symbol Rate	5.0Msps~7.0Msps, 1ksps stepping	
		Constellation	16/32/64/128/256 QAM	
		Constellation	J.83A	J.83B
			16/32/64/128/256 QAM	64/256 QAM
		Bandwidth	8M	6M
	DVB-T	RF out	4x RF DVB-T out (4 carriers combined 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	17 ~ 37 dBmV, 0.1db step	
Stream output	RF output (F type interface)			
	4 IP MPTS output over UDP/RTP, 1*1000M Base-T Ethernet interface			
System function	Network management (WEB)			
	English language			
	Ethernet software upgrade			
Miscellaneous	Dimension (W×L×H)	482mm×410mm×44mm		
	Environment	0~45°(work);-20~80°(Storage)		
	Power requirements	AC 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz		