



MICROWAVE DIGITAL TX 70-2250



The new H.264 Encoder is designed for the transmission of high-resolution picture data, especially for HD-TV applications.

The encoder is extremely economical with 3 W power consumption at the maximum.

Supported formats are HD (1920×1080px) and SD (PAL, NTSC) with netto data rates from 1,5 Mbit/s to 31 Mbit/s.

Included in this data rate is a stereo audio channel between 32kbit and 384kbit.

The encoder board outputs a transport stream to a 8 bit wide TS interface with clock and frame sync signal.

The video input can be chosen between YPbPr, CVBS and HDMI; the picture resolution is up to 1080p@60Hz.

The H.264 encoder can be operated autonomously.

The HD / SDI-In module is a serial-to-parallel converter and converts an HD/ SDI data stream to ITU656.

Connected to the MPEG encoder, the module features an additional HD / SDI input to the encoder. Embedded audio IF Frequency Range 70-2250MHz

table

DVB-S	Constellation	QPSK		
	Modulation Error Rate (MER)	>27 dB		
	FEC	¹ ₂ , ² ₃ , ³ ₄ , ⁵ ₆ , ⁷ ₈		
	Symbolrate	1–45 MSymbol/s in 1 kSymbol-steps		
	RF_{out}	80–107 dBμV@50 Ω		
DVB-S2	Constellation	QPSK, 8PSK, 16APSK, 32APSK		
	Modulation Error Rate (MER)	>27 dB		
	FEC (LDPC)	¹ ₄ , ¹ ₃ , ² ₅ , ¹ ₂ , ³ ₅ , ² ₃ , ³ ₄ , ⁴ ₅ , ⁵ ₆ , ⁸ ₉ , ⁹ ₁₀	Note: not every FEC is supported in each constellation!	
	Symbolrate	1–32 MSymbol/s in 1 kSymbol-steps		
	Roll-Off-Factor	0.2, 0.25, 0.35		
	Pilots	on/off		
	RF_{out}	80–107 dBμV@50 Ω		
DVB-C	Constellation	QAM16, QAM32, QAM64, QAM128, QAM256		
	Modulation Error Rate (MER)	>45 dB		
	Symbolrate	1000–7000 kSymbol/s in 1 kSymbol-steps		
	RF_{out}	80–107 dBμV@50 Ω		
DVB-T	Constellation	QPSK, QAM16, QAM64		
	Modulation Error Rate (MER)	>40 dB		
	FEC	¹ ₂ , ² ₃ , ³ ₄ , ⁵ ₆ , ⁷ ₈		
	Guard Interval	¹ ₄ , ¹ ₈ , ¹ ₁₆ , ¹ ₃₂		
	IFFT Mode	2k, 4k, 8k		
	Bandwidth	5, 6, 7 and 8 MHz		
	RF_{out}	80–100 dBμV@50 Ω		
ATSC	Constellation	8VSB		
	Modulation Error Rate (MER)	>38 dB		

RF Frequency Range 10450-10850MHz

max 70 km from work

IF Level 0-15 dBm

Connector F Type

Video Input HD/SDI HDMI

Video Input Connector BNC OR HDMI SOCKET

NOT (BNC=HD / SDI Embedded audio)

Video format H264

Selectable Encoding Bit Rate 4:2:0 1.5 to 15Mbps

Audio Input Connector XLR

Audio Input Connector 2xXLR

Audio Input Level +10dBm max

Operating Modes Stereo, Joint Stereo, Dual channel and Mono

32kHz, 48kHz, 56kHz, 64kHz, 80kHz, 96kHz, 112kHz 128kHz,

160kHz, 192kHz, 224kHz, 256kHz, 320kHz, 384kHz

Line Input Voltage Range 185-265 VAC Line

Frequency 50 Hz +/-%10

Temperature Range 15°C to 50°C

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