

EMI3381

8 channels H.264 HDMI To RF Encoder Modulator
built-in Multiplexer, RF Modulator and RF Up-Conversion



EMI3381 is a Cost-effective, high definition MPEG4 AVC broadcast distribution encoder with QAM modulation and RF up-conversion built in. It has equipped with up to 8 channels of HDMI inputs, 1 ASI input, and output with 2 ASI ports, 1 UDP IP port, and 1 RF port.

The signals source could be from satellite receivers, closed-circuit television cameras, Blue-ray players, and antenna etc. Its output signal is to be received by a DVB-C/DVB-T/ATSC/ISDB-T standard TV, STB.

EMI3381 can be used in public place such as metro, market hall, theater, hotels, resorts, etc for advertising. It also can be used for monitoring, training and educating in company, schools, campuses, hospital... besides that it's a good choice for bars to offer HD sports channels, for VIP entertainment channels, and more.

Features

- Up to 8 channel HDMI (HDCP) Encoding per chassis
- Simultaneous outputs via IP, DVB-ASI and modulated interfaces
- Support Single, Dual, Quad Modular channel out
- Advanced MPEG-4 AVC HP@L4 video compression
- ASIC technologies which offer broadcast video quality, generally video bitrate advised 720p about 2mbps, 1080p about 5mbps for lowest bitrates
- HDMI 1.3a interface, Auto detect the HDMI input of resolutions
- Resolution: 1080p, 1080i, 720p@50/60Hz, 576p, 480p
- RF attenuation range is from 0 ~ -24dbm (81~97dBμV) with 0.1db step.
- Cascading via DVB-ASI or RF Port
- Excellent modulation quality MER≥42dB
- Optional DVB-C (QAM), DVB-T (COFDM), ATSC-T, ISDB-T modular
- RF frequency: 30-1000MHz, 1kHz step
- High performance standard of Encoder/Modulator with superior RF specifications, stream and processing functionality
- PSI/SI generate and NIT insertion, LCN modify
- PID filter, Pass and remapping
- High quality video and audio outputs
- Management via WEB, Local front panel with LCD
- Easy-to-Use System Management

TECHNICAL SPECIFICATIONS

Input

Video Input	Selectable single, dual, eight channels HDMI 1.3a MPEG-4 AVC (H.264) High Profile Level 4.0
Resolution	1920×1080_60p, 1920×1080_50p 1920×1080_60i 1920×1080_50i 1280×720_60p, 1280×720_50p, 720x480, 720x576
Bit rate	0.8-20Mbps per channel
Audio Input	HDMI embedded audio
Sampling Rates	48KHz
Bit rate	64, 128, 192, 256, 384kbps
Audio encoding	MPEG-1 Audio Layer
Quantization	24bit

Output

ASI Output	DVB Interface: Two identical ASI stream out Comply to EN 50083-9 ASI Standard, BNC, 75Ω
MPEG-TS over IP Output	IP output: 1000M Base-T Ethernet UDP/IP output, Multicast/Unicast supported

Output Format	188 bytes
The IP stream will include all the programs and will be sent to the specified multicast or unicast IP Address	
RF output	Connector F-Type, 75Ω
Modular channel	DVB-C: 4; DVB-T: 2; ATSC: 4; ISDB-T: 2
	1 RF port output
	Mixer with 1 RF port input

QAM Modulation Output

Output Connector	1 x RF Output, 1 x -20dB RF Output (Test Port)
Connector Type	F-Type (Female, 75Ω)
RF Frequency Range	48 to 870 MHz
Bandwidth	6 or 8MHz
QAM channel	4 DVB-C RF output 15.5M-51.6Mbps per QAM channel

	ITU-T J.83 Annex A, B and C
Annex A	16 /32 /64 /128 /256QAM
Annex B	64/256QAM
Annex C	32 /64 /128 /256QAM

Annex A	4.2 to 7 Mbaud
Annex B	5.057 Mbaud
Annex C	4.2 to 5.3 Mbaud
	90 to 110dB μ V (RF output Port)
	70 to 90dB μ V (-20dB test port)

MER	≥ 38 dB (64QAM, 6.875MBaud)
SNR (Out of band)	≥ 50 dB
Return Loss	≥ 12 dB
	0 to 10dB, Step Size 0.25dB

DVB-T Modulation Output

Standard	EN300744
FFT mode	2K, 8K
Bandwidth	6-8M
Constellation	QPSK, 16QAM, 64QAM
GI(Guard Interval)	1/4/, 1/8, 1/16, 1/32
FEC code	1/2, 2/3, 3/4, 5/6, 7/8
MER	≥ 42 dB
RF frequency	30~960MHz, 1KHz step
RF output level	-30~ -10dbm (81~97 db μ V)
	0.1db step

ISDB-T Modulation Output

Standard	ARIB STD-B31
Bandwidth	6Mhz
Constellation	DQPSK, QPSK, 16QAM, 64QAM
Guard Interval	1/32, 1/16, 1/8, 1/4
FFT Mode	2K, 4K, 8K
FEC (Code Rate)	1/2, 2/3, 3/4, 5/6, 7/8
RF frequency	30~999MHz, 1KHz step

ATSC Modulation Output

Standard	ATSC A/53
Constellation	8VSB
MER	≥ 42 dB
RF frequency	30 ~ 999MHz, 1KHz step

RF output level	-30 ~ -10dbm (77~97 db μ V)
	0.1db step

Multiplexing

	1xASI inputs, BNC
	Selectable any or all programs of TS inputs
	PID passthrough

Control

7 keys	100M Base-T Ethernet, RJ45 WEB UP, DOWN LEFT, RIGHT, ENTER, ESC, LOCK Front-Panel KEY Borard, LED, indicate light
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Environment

Comply to GB13837-92 & Power Supply	GB8898-88 standard AC 100-250V 50/60Hz
Power consumption	30 W
Operating temperature	-10 - 50°C
Storage temperature	-10 - 75°C
Dimensions	300 (L) x 483 (W) x 44mm (H) (1RU)
Weight	7kg