

## INGRON7208EM Eight-Channel CVBS to DVB-T MPEG-2 SD Encoder Modulator



### Features

- Support all DVB-T(COOFDM)
- Video compression: MPEG-2 SD
- Audio compression: MPEG-1 Layer II, and AC3
- PAL/NTSC SD modes available
- Providing ASI and 2\*MPTS/8\*SPTS IP (UDP) output
- Output with 2\*adjacent DVB-T frequencies
- Able to multiplex local digital signals with external TS
- Equipped with empty packets filtering of IP out
- Input interface: 8\*CVBS, 8\*unbalanced stereo L/R
- LCN(Logical Channel Number) supported
- Easy operation and upgrading by keyboard or LCD
- SNMP or WEB management for control

### Specifications

#### Video Compression

Video Compression	MPEG-2 SD, 4:2:0 MP@ML
Video Input	8*CVBS
Analog Video Input	PAL, NTSC
Resolution	NTSC / 720*480_59.94i, 544*480_59.94i, 352*240_59.94i, 320*240_59.94i, 176*240_59.94i, 160*120_59.94i; PAL / 720*576_50i, 640*576_50i, 352*288_50i, 320*288_50i, 176*288_50i, 176*144_50i
Bit-Rate	0.125 ~ 19 Mbps, CBR/VBR

#### Audio Compression

Audio Compression	MPEG-1 Layer II, AC3
Audio Input	8*unbalanced stereo L/R
Sampling Rate	48 KHz
Bit-Rate	64 Kbps ~ 320 Kbps (for any channel)

#### Input

Video	8*CVBS, BNC interface
Audio	8*unbalanced stereo L/R, BNC interface
TS	1*ASI, BNC interface

#### Multiplexing

Multiplexing with external ASI(1\*SPTS or 1\*MPTS) in

Multiplexing with 8 local encoded programs

#### Output

ASI Output	Number	1*ASI+1*ASI(backup)
	Standard	EN 50083-9 ASI
	Output Bit Rate	Max. 170 Mbps
	MPEG Frame	188/204 byte
	Reflection Loss	>10 dB
	Connector Type	75 Ω, BNC interface

IP Output	Transport Protocol	TS over IP output, UDP protocol
	IP Output Channel	1*MPTS or 8*SPTS
	Connector Type	RJ45, 10/100M
	Support empty packets filtering	

**Modulation**

DVB-T Mode	Standard	EN300744
	Constellation	QPSK, 16QAM, 64QAM
	Frequency Range	30 ~ 999 MHz, by 1 KHz stepping
	MER	≥42 dB
	Output Level	-30 ~ -10 dBm(77~97dbμV), by 1 dB stepping
	Bandwidth	6M, 7M, 8M
	FFT	2K, 8K
	FEC	1/2, 2/3, 3/4, 5/6, 7/8
	Guard Interval	1/4, 1/8, 1/16, 1/32
	RF Out	2*adjacent DVB-T frequency

**Management**

Connector	1*RJ-45, 10/100 Base-T (NMS interface)
Remote Control	by NMS
Local Control	LCD and keyboard on front panel

**General**

Voltage	100~240V AC, 50/60Hz
Consumption	25 W
Environment	0~45°C (Operation), -20~80°C (Storage)
Dimension (W*D*H)	482*410*44 mm
Gross Weight	2.8 KGS

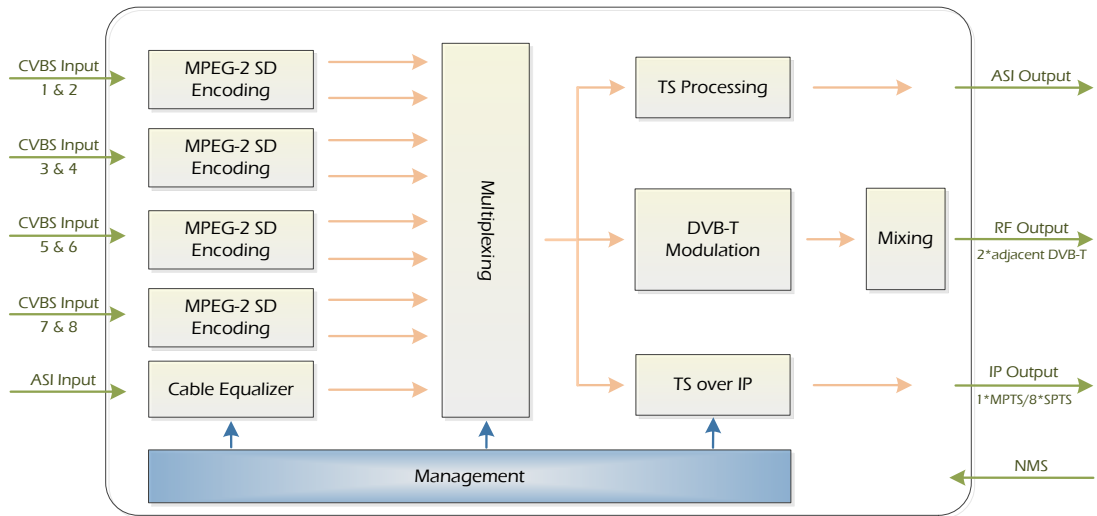
**Introductions**

INGRON7208EM Eight-Channel CVBS to DVB-T MPEG-2 SD Encoder Modulator offers a professional and high-integration modulator, together with encoding module. The device is able to accept 8-channel of CVBS signals, and compresses signals in MPEG-2 SD standard. Additional TS from ASI port is able to be mixed and multiplexed with the input channel(s). The device then modulates signals in 2\*adjacent DVB-T mode in excellent index, with one RF and the other test out interfaces. INGRON7208EM is able to be flexibly taken as an independent encoder, or modulator, too, as per its design of modularization. Due to its professional and full functions, INGRON7208EM is able to be applied to IPTV system, digital TV broadcasting & distribution systems, home entertainment, advertisement broadcasting, etc., in shopping mall, hospital and school, hotel and restaurant, museum, theater, cinema, community, airport, railway station, public square, club, and so on.

**Rear Panel**



Diagram



Options

	<b>INGRON7208EM</b>	<b>INGRON7208EM</b>	<b>INGRON7308EM</b>
Encoding Standard	MPEG-2 SD	MPEG-2 SD	MPEG-2 / H.264 SD
RF Out	1*DVB-C	2*DVB-T	1*DVB-C or 2*DVB-T