

High definition DVB-T
COFDM modulator encoder.
50-860MHZ

MPX-HDMI-DVB-T

Inputs Video Audio, via HDMI



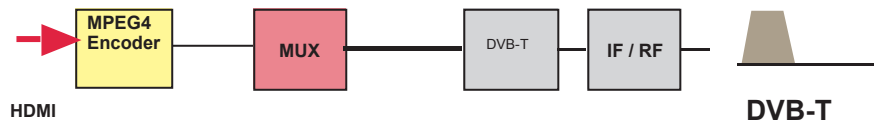
£99.00

Full HD
1080

1080p & 1080i encoding

Crisp Clear HD pictures
on large screen TV

HDMI Encoding Section		
Video	Encoding	H.264 MP@L 3.0/3.1/4.0
	Input	Output
	480@59.94/60p	480@60p
	480@59.94/60i	480@30p
	576@50i	576@25p
Resolution	720@50/59.94/60p	720@50/59.94/60p
	1080@50i	1080@25p
	1080@59.94/60i	1080@30p
	1080@59.94/60p	1080@30p
Aspect Ratio	16:9, 4:3	
Bit rate	1.000~18.000 Mbps	
Audio	Encoding	MPEG1 layer 2
	Sample rate	48KHz
	Bit rate	64, 96, 128, 192, 256, 320kbps



MPEG 4 (H264) Encoder

PSU Included

DVB-T Modulator Section	
Standard	DVB-T COFDM
Bandwidth	6M, 7M, 8M
Constellation	QPSK, 16QAM, 64QAM
Code rate	1/2, 2/3, 3/4, 5/6, 7/8
Guard Interval	1/32, 1/16, 1/8, 1/4
Transmission Mode:	2K, 8K
MER	≥31dB
RF frequency	150~950 MHz, 0.1KHz step
RF output level	-47~0 dBm (60~107 dBμV), 1db step
System	
RF mix in ATT	10 dB
Management	Local LCD + control buttons
Upgrade	USB
General	
Power supply	DC 12V
Dimensions	183*110*50mm
Weight	< 1kg

For MPEG 2 Encoding see page 40-45

HDMI sources sometimes have HDCP, (High bandwidth digital protection) that sometimes restricts use.

Use a HDMI splitter to overcome, using a splitter will usually block the HDCP encryption, see Wikipedia, HDCP

OK with most set top boxes



Control via front panel or PC connected to modulator

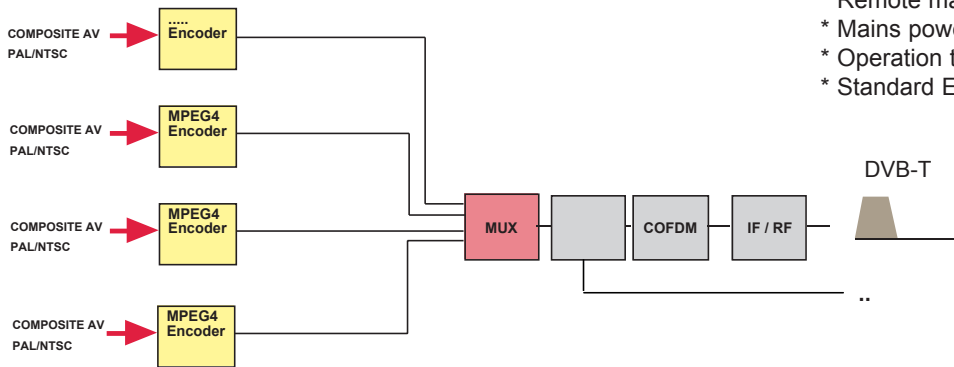
Video and Audio MPEG 4..... encoders to IP. DVB-T COFDM version includes both DVB-T and IP out

Composite Audio Video (PAL).

Into MPEG4 ... 2 encoder and ten` modulated` into DVB-T

- * RF loop through
- * MPEG2/4 AVC H.262.H264 encoding available
- * LCN Function
- * Modulation QPSK, 16QAM, 64QAM COFDM
- * FFT mode 2K or 8K
- * Channel bandwidth 7-8MHz
- * Output level 97dBuV
- * Level adjustment 15dB
- * Audio Encoding MPEG1 Layer (1*Stereo or 2*mono)
- * MER typ ≥42dB
- * Guard intervals 1/4,1/8,1/16,1/32
- * Code rate 1/2,2/3,3/4,5/6,7/8
- * IP out
- * ASI out
- * LCD + control buttons
- * Remote management Web NMS
- * Mains power 100-240V AC
- * Operation temperature 0-35 Deg C
- * Standard EN300744

Example



Please note ,some older or non HD TV sets may need MPEG2 encoding.

All DVB-T modulators on this page also have IP out so as well as distributing on a CATV system for TV sets ,the IP out can be connected to a computer network and PC,s or tablets used to receive video and audio. The local area network needs to have the capacity in bandwidth to accommodate the number of TV programmes distributed.

MPX AV4 DVB-T AV R	MPEG 4. Quad Encoder, COFDM modulator,rack mounted	4 x AV input,PAL/NTSC stereo audio	£829.84
MPX AV8 DVB-T AV R	MPEG 4. Eightfold Encoder, COFDM modulator,rack mounted	8 x AV input,PAL/NTSC stereo audio	£1,185.97
MPX AV4 DVB-T AV R 2	MPEG 2. Quad Encoder, COFDM modulator,rack mounted	4x AV input,PAL/NTSC stereo audio	£829.00

Specification and [prices subject to](#) change without notice.
Prices excluding VAT

MPEG (H264) and MPEG (option) (H262) Encoder Modulators High or Standard definition DVB-T encoder. COFDM modulator. 30-860MHZ



DVB-T COFDM version includes both DVB-T and IP out, systems can be configured to provide all modulated programmes ,distributed via coax and via a local area network at the same time.

Very low latency when using MPEG 2 encoding, mode1.
Example , 1080i@50, Encoding , typical latency utilising maximum available bandwidth (mgbits) 0.17 seconds,720p@50, 0.086 seconds. This is typical latency using a good quality set top box or TV . MPEG4 encoding can have latency at approximately double of MPEG2 . Very usefull for time critical applications

Specifications

Encoding section

Video

Encoding [MPEG2 or MPEG4 H.264, see options below](#)

Input HDMI x 4 & x 8 or SDI x 4

Resolution 1920*1080_60i, 1920*1080_50i, 1280*720_60p, 1280*720_50P 720*480_60i, 720*576_50i

[Option on request 1920*1080_60P, 1920*1080_50P, MPEG4 AVC/H.264 only](#), not recommended uses excessive bandwidth in mux, no noticeable difference compared to 1080i, not normally used for broadcasting or CATV networks

Low delay Normal, mode 1 mode 2

Symbol rate 5.000~9.000Mpsps adjustable

J 83A

Constellation 16/32/64/128/256QAM

bandwidth 8M

J 83B

Constellation 64QAM/ 256QAM

bandwidth 6M

J 83C

Constellation 64QAM/ 256QAM

bandwidth 6M

Modulation options

DVB-T

Standard EN300744

Bandwidth 6M, 7M, 8M

Constellation QPSK, 16QAM, 64QAM,

Code rate 1/2, 2/3, 3/4, 5/6, 7/8.

Guard Interval 1/32, 1/16, 1/8, 1/4

Transmission Mode: 2K, 8K

MER ≥42dB

RF frequency 30 to 960MHz, 1KHz steps

RF Out COFDM DVB-T out

RF output level 77 to 97 dbμV Adjustable

DVB-C

Standard J.83A , J.83B, J.83C

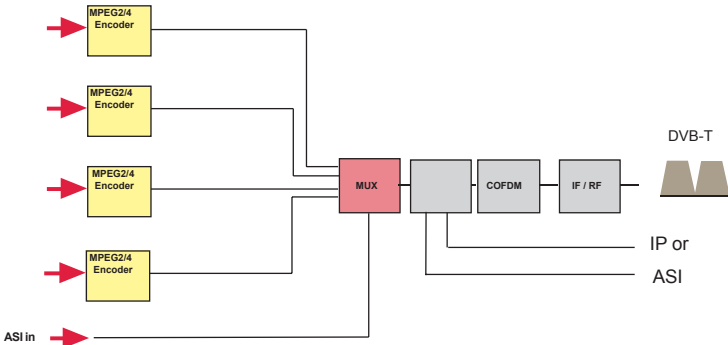
MER ≥42dB

RF frequency 30 to 960MHz, 1KHz steps

RF output level 77 to 97 dbμV Adjustable

or 2 x mono)

Example of MPEG 2 and 4 encoding



MPEG4 or MPEG2 can be configured, then modulated into DVB-T.

DVB-T2 available on request at an additional cost.

DVB-T2 is not normally needed on CATV systems due to available bandwidth. A modulator above with 4 HD inputs has the capacity to modulate up to 16 mgbits per HD TV program.

MPX-HD/SDI 2DVBT,R HDMI 2/4 MPEG 4/2 Dual Encoder , COFDM modulator,rack mounted	2 x HDMI inputs	£2,151.94
MPX-HD/SDI 4DVBT,R HDMI 2/4 MPEG 4/2 Quad Encoder, COFDM modulator,rack mounted	4 x HDMI inputs	£2,550.59
MPX-HD/SDI 2DVBT,R SDI 2/4 MPEG 4/2 Dual Encoder,COFDM modulator,rack mounted	2 x SDI inputs, embedded audio	£2,835.88
MPX-HD/SDI 4DVBT,R SDI 2/4 MPEG 4/2 Quad Encoder,COFDM modulator,rack mounted	4 x SDI inputs, embedded audio	£3,290.88

All DVB-T COFDM modulators on this page also come with IP out unless otherwise stated.

Specification and prices subject to change without notice.
Prices plus VAT

HDMI input is sometimes unable to capture from some copy protected HDMI sources, such as blue ray players, if HDCP encryption is embedded in the video /audio stream, doesn't normally apply to set top boxes or normal DVD player. HDCP strippers are available from other vendors.

HDMI video, can also can be unstable if impulse electrical noise gets into the HDMI lead, this can be due to the HDCP master key going corrupt due to electrical noise, so ensure screened HDMI cables are used and high voltage cables are not installed nearby.

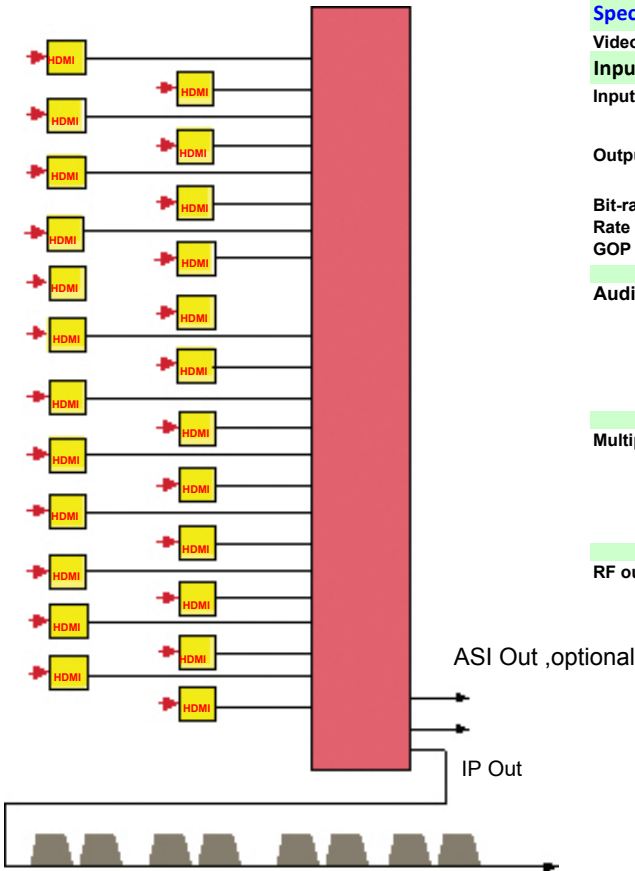
MPEG (H264)..... DVB-T Modulators
Up to 24 HDMI inputs in one, 1 U rack
High or Standard definition encoder. DVB-T
COFDM modulator. 30-860MHZ
Output Includes IP, into standard local area network.
Costs as less than £130.00 per HD/SD TV programme

Set up and control via web management



MPX-HD/SDI 8DVBT,R HDMI B	MPEG 4 Eightfold, Encoder ,rack mounted	8 x HDMI inputs	£980.80
MPX-HD/SDI 16DVBT,R HDMI B	MPEG 4. Sixteenfold Encoder,COFDM modulator,rack mounted	16 x HDMI inputs	£1,802.50
MPX-HD/SDI 24DVBT,R HDMI B	MPEG 4. Twentyfourfold Encoder,COFDM modulator,rack mounted	24 x HDMI inputs	£2,375.00

24 HDMI input version illustrated



4-8 DVB-T Multiplexes out depending on number of inputs.A

Specifications

Video MPEG4 H264

Input options HDMI 8, 16, 24

Input resolutions 1920x1080_60P, 1920x1080_60i,1920x1080_50P, 1920x1080_50i, 1280x720_60P, 1280x720_50P,720x576_50i,720x480_60i,

Output resolutions 1920x1080_30P, 1920x1080_25P,1280x720_30P, 1280x720_25P, 720x576_25P,720x480_30P,

Bit-rate 1Mbps~13Mbps each channel
 Rate Control CBR/VBR
 GOP Structure IP...P (P Frame adjustment, without B Frame)

Audio Encoding MPEG-1 Layer 2
 Sampling rate 48KHz
 Resolution 24-bit
 Audio Gain 0-255 Adjustable
 Bit-rate 64kbps, 128Kbps, 192kbps, 224kbps, 256kbps, 320kbps, 384kbps

Multiplexing Maximum PID Remapping 180 input per channel
 Function PID remapping (automatically or manually)
 Maximum simulcrypt CA Accurate PCR adjusting,Generate PSI/ SI table automatically

RF output Options DVB-C QAM 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 (87~117 dbμV), 0.1db step
 Symbol Rate 5.0Msps~7.0Msps, 1ksps stepping
 J.83A J.83B
 Constellation 16/32/64/128/256QAM 64/256 QAM
 Bandwidth 8M 6M

DVB-T QPSK, 16QAM, 64QAM Maximum 8 non-adjacent carriers.
 Standard EN300744
 FFT mode 2K,4K, 8K
 Bandwidth 6M, 7M, 8M
 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 -20~ +10 dBm (87~117 dbμV), 0.1db step

Stream output 1000M Base-T Ethernet interface
 Power AC 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz

For low latency applications use MPEG 2 Encoding, MPEG2 Encoding occupies more bandwidth and consequently needs less compression.

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 Prices plus VAT

HDMI input is sometimes unable to capture from some copy protected HDMI sources, such as blue ray players, if HDCP encryption is embedded in the video /audio stream, doesn't normally apply to set top boxes or normal DVD player. HDCP strippers or HDMI splitters are available from other vendors.

TXS

MPX-DVB-T-IP

16 x DVB-T T2, Inputs to IP out



Input 16 x DVB-T 60-890MHz
Bandwidth 6/7/8 MHz
Constellation 16/32/64/128/256 QAM

Output 16 MPTS IP output (for Tuner/ASI passthrough) over UDP and RTP/RTSP protocol through GE1 and GE2 port, Unicast and Multicast

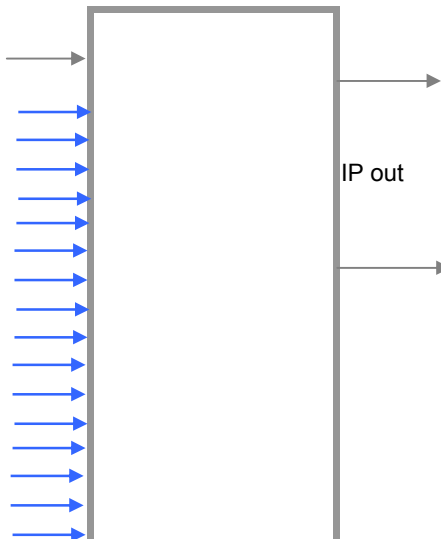
Web based management

Power requirements 100~240VAC, 50/60Hz
Power consumption 20W

Web Management

16 x DVB-T inputs

**Exceptional Quality
Great Price £1,913.60
Ex VAT**



46B

TXS

UHD Digital modulator.

DVB-T or C output

One HDMI input + redundancy. Price Ex VAT

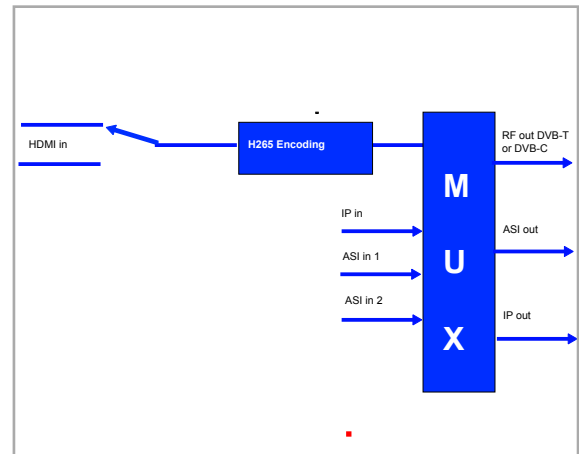


H.265/HEVC and H.264/AVC, multiplexing and modulating functions in one standard 1U case. **£4,754.64**



Logo, Caption, QR code insertion

Video Input	Resolution		Chroma		
	3840×2160_60P, 3840×2160_59.94P, 3840×2160_50P, 3840×2160_30P, 3840×2160_29.96P, 3840×2160_25P, 3840×2160_24P, 1920×1080_60P, 1920×1080_59.94P, 1920×1080_50P, 1920×1080_30P, 1920×1080_25P, 1920×1080_24P,		RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0 (2160P_50/60Hz only)		
Video Encoding	Encoding	H.265/HEVC, H.264/AVC			
	Chroma	4:2:2, 4:2:0			
	Bit-rate	1Mbps~23Mbps			
	Rate Control	CBR			
Audio Encoding	Encoding	MPEG-1 Layer 2, LC-AAC			
	Sampling rate	48KHz			
	Bit-rate	64Kbps~256Kbps each channel			
Multiplexing	2 ASI input multiplexed with local 1 channel of TS				
	PID remapping (automatically or manually)				
	Accurate PCR adjusting				
	Generate PSI/SI table automatically				
Modulator Section	DVB-C	Standard	J.83A, J.83B		
		MER	≥43dB		
		RF frequency	50~960MHz, 1KHz step		
		RF output level	-25.0~-1 dbm, 0.1db step		
		Symbol rate	5.0 - 7.0 Msps		
			J.83A	J.83B	
		Constellation	16/32/64/128/ 256 QAM	64/ 256 QAM	
		Bandwidth	8M	6M	
		RF out	1*RF DVB-C out		
	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		
		Code rate	1/2, 2/3, 3/4, 5/6, 7/8		
		MER	≥42dB		
		RF frequency	50~960MHz, 1KHz step		
		RF output level	-30 to -3dbm, 79-106dBuV 0.1db step		
RF out		1*RF DVB-T out			
		1*ASI output through 4 BNC interfaces			
Stream output		1 MPTS over UDP/RTP, 1000M/100M Base-T Ethernet interface (unicast/ multicast)			



Specification and prices subject to change without notice.