



## MD AV ENCODER for DVB-H and 3GPP Mobile Services

*“Mobile TV & Video Streaming”*

DVB-H is enabling Mobile Television multicast services while 3GPP is tailored for video streaming unicast services to mobile handsets.

MD Video/Audio Encoder provides real-time AV encoding, AV synchronisation and encapsulation into RTP/UDP IP packets for DVB-H & 3GPP mobile video standards.

There are some differences and some commonalities between DVB-H & 3GPP AV Encoding.

Common features are small picture size, encapsulation into RTP/UDP IP packets, real-time operation etc.

They differ in used Video and Audio Codecs. DVB-H defines state-of-the-art H.264 video and AAC audio coding, while 3GPP relies on simpler H.263 video with AMR audio coding.



Due to the H.264 high computing power requirements several DVB-H handset prototypes still use H.263 coding.

Video Input can be either composite video (Series 1000), SDI (series 1005) or DVB-S Satellite receiver with MPEG2 Decoder.

MD AV Encoder can be deployed in redundant configuration with a fail over switch option in order to eliminate service down time.



## Technical Specifications:

### Output:

Physical : 1 x Ethernet (10/100 Base T)  
File Output: 3GPP, 3GP2, MPEG-4  
Protocol: RTP/UDP; IP Unicast or Multicast, SDP

Dimensions: 19" rack mount 1RU,  
431 x 44 x 580 mm

Weight: 14 kg

Control: X-Windows with preview  
CML, config file

## Video:

Codecs: H.264, MPEG-4, H.263  
Picture resolution: SQCIF to CIF resolution  
Frame per second: 1-30 fps  
Data rate: 15 kbps to 2 Mbps

### Video Inputs:

Analog Composite (PAL/NTSC)  
S-Video  
SDI - Serial Digital Interface (625 /525) (Optional)  
DVB-S (optional)  
DVB-T (optional)

## Audio:

Codecs: AAC, MP3, AMR  
Data rate: 8 to 384 kbps  
Sampling Frequency: 8000-44100 Hz

### Inputs:

1 Channel (1 stereo or dual mono)  
2 Analog Balanced/Unbalanced  
DVB-S (optional)  
DVB-T (optional)

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