MPEG2 & h.264 AVC Broadcast Encoder

**Features:**
- MPEG-2 HD/SD and MPEG-4 AVC/H.264 HD/SD video encoding
- 1080i, 720P, 480i, 576i video resolution and downscale transform
- Low latency
- MPEG1 Layer II, HE-AAC (v1 & v2), LC-AAC and DD AC3 audio encoding and adjustment
- Dolby Digital AC3 audio pass through (for SDI in)
- Additional 4 stereo or 8 mono audio encoding
- Video buffer, selectable Video sources (all video interfaces available in parallel Inputs)
- Support TT/CC (closed caption-US norm), EIA 608 and EIA 708 (for CVBS and SDi in)
- Dual parallel ASI output and IP over UDP and RTP
- LCD / Keypad control and Web based management by RJ45 Ethernet port
- AD-Insertion: QR code, LOGO, OSD-text

MPEG-2/H.264 SD/HD Encoder is a broadcasting audio & video encoding device with powerful functionality.
Equipped with multiple and therefore flexible Video input interfaces (SDI, CVBS, YPbPr and HDMI) and Audio input interfaces (AES, RCA and XLR) to be compatible with different signal sources.
Multiple audio and video encoding formats are available to meet your flexible and various requirements.
4 stereo (8 mono) or one DD 5.1 (AC3) audio signals can be embedded to the stream output.
The encoded program will finally output in a DVB conform TS through 2 ASI and 1 IP port.
The MPE-4000 has an overlay insertion feature: QR code, LOGO and OSD-TEXT with 3 parallel overlay operations at the same time. You can insert an advertisement picture, own LOGO, special QR code and/or OSD text content on top of the encoding process.

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Technical Data:

### Video
- **Interface:** 1×SDI, 1×CVBS, 1×YPbPr and 1×HDMI
- **Resolution**
  - Input
    - 1920×1080@60
    - 1920×1080 @59.94
    - 1920×1080i @50
    - 1280×720p @60
    - 1280×720p @59.94
    - 1280×720p @50
  - Output
    - 1920×1080, 1440×1080, 1280×1080i, 960×1080i
    - 1280×720p, 960×720p, 640×720p
    - 720×576, 704×576, 640×576, 544×576, 528×576, 480×576, 352×576
    - 720×480, 704×480, 640×480, 544×480, 528×480, 352×480
- **Encoding**
  - MPEG-2 HD/SD
  - MPEG-4 AVC/H.264 HD/SD
- **Bitrate Range**
  - 0.52 – 60.00 Mbps
- **Rate Control**
  - CBR (Encoding)
  - GOP Structure: Auto, IP, IPB, IPBB, IPBBB
- **Aspect Ratio**
  - 4:3, 14:9 (for SD video), 16:9 (for HD video)
- **Chroma**
  - 4:2:0, 4:2:2
- **Advanced Pretreatment**
  - De-interlacing, noise reduction, sharpening

### Audio
- **Interface**
  - 4×XLR, 4×RCA, 1×AES, 1×HDMI, 1×SDI (maximum 4 stereos synchronous processing or one DD 5.1 CH processing)
- **Encoding**
  - MPEG-1 Layer II, HE-AAC (v1&v2), LC-AAC, DD AC3 (2.0, 5.1 available); DD AC3 pass-through (for SDI in)
- **Sampling rate**
  - 48KHz
- **Resolution**
  - 24-bit
- **Bit-rate**
  - 32Kbps...384Kbps

### Low Latency options
- 150ms, 200ms, 350ms, 650ms depending on Resolution and S-Rates

### System function
- 2×ASI output ports, BNC interface, IP over UDP and RTP, 100 Base-T Ethernet interface (UDP multicast/unicast)
- LCD/Keypad and web management, Language: English, Ethernet based software updates

### General
- **Dimensions**
  - 482mm × 405mm × 44.5mm (W × D × H)
- **Weight**
  - Approx. 4.0 Kg
- **Temperature**
  - 0...45°C (Operation), -20...8°C (Storage)
- **Power**
  - AC110V ±10%, 50/60Hz; AC 220V ±10%, 50/60Hz
- **Consumption**
  - 21W

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Specifications are subject to change without notice.