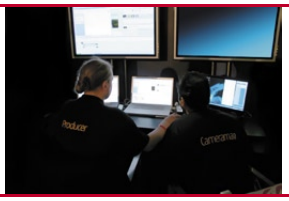
EDBoX©
Encoding & Decoding Solutions

EDBoX 1000 SD AVC Encoder

and NEW EDBoX-4 Web-Interface for Encoding/Decoding Solution

The 24/7 Operation Environment





Description

The **EDBoX H.264 Encoder** is a professional product for Digital TV industry. A compact 1RU solution provides H.264/AVC (MPEG-4 part 10) 4:2:0/ 4:2:2* video compression.

The **EDBoX 1000 SD AVC Encoder** is a cost-effective solution based on our intelligent video pre-processing and encoding technology, allowing to achieve broadcast quality at minimal possible bit rates.

EDBoX systems are widely used all over the world in **24/7 environment**, applicable to live broadcasts, IPTV head-ends, SNG, videoconferencing etc.

The EDBoX Encoder saves a channel bandwith keeping the excellent picture quality thanks to highly optimized compression ratio. This enables Operators and Telcos to increase the number of channels transmitted over Satellite, Terrestrial, Cable and IPTV networks.

Guaranteeing strict conformance to AVC H.264 standard specification, our Encoder offers wide range of flexibility and unique set of features. Examples are on-the-fly realtime bit-rate changing, ultra-low bit rate encoding, **Low Latency mode (<400ms)**.

The EDBoX Encoder can be supplied with MPEG-2, WM9 and VC1 encoding in parallel* to H.264 AVC within the same 1U unit .

We are pleased to announce the new EDBoX-4 Web-Interface and Firmware

The Firmware Improvements extend the range of Video Encoder Applications:

> Optimized video picture quality

> Special Low-Latency Mode down to 400 ms end-to-end

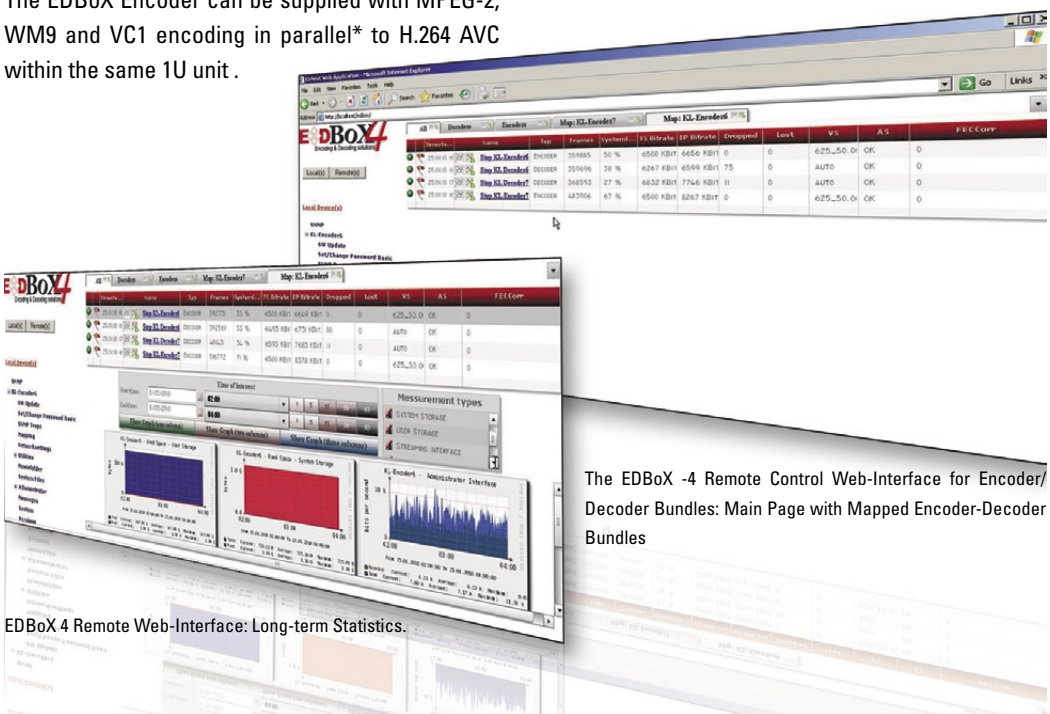
> Bit rate changing on-the-fly, effect in 100 ms in runtime

> Minimal possible Transport Stream overhead for saving channel bandwith

> DVB over IP, fully compliant to EN 300 468 *

> Extended audio standard support: ADTS / LATM AAC HE v1/v2 (1/2/4/5.1/6ch), MPEG-2 BC (1/2ch), MPEG-1 Layer II (2/4/6/8ch), Dolby digital® AC3 (up to 6CHA*)

* optional



The EDBoX -4 Remote Control Web-Interface for Encoder/ Decoder Bundles: Main Page with Mapped Encoder-Decoder Bundles

EDBoX 4 Remote Web-Interface: Long-term Statistics.

Product Highlights

- Professional real-time H.264 Encoder
- Compact 1U Design
- Cost-effective Intelligent Solution
- Intergated with Dataminer NMS System
- On- the - Fly Bit Rate Change
- CBR/VBR, from 3 to 15 Mbps
- DVB-ASI and IP Outputs
- COP#3 FEC for IP Networks
- Low Delay Mode
- Saves Channel Bandwith and increases the transmitted Channels
- MPEG-2, WM9, VC1 Encoding

Applications:

- Broadcast
- IPTV
- SNG
- Studio Links
- Distribution Networks
- Corporate Streaming
- Mobile TV
- Webcasting

The EDBoX 4 Web-Interface

The EDBoX-4 Remote Control Webinterface adjusted for Greater Ease of Use:

- Improved intuitive user-interface design
- Overall unit status display, audio / video signal loss
- Detection and alarming, FEC status signaling
- Real-time graphs and long-term statistics for major parameters (actual bit-rate, system load, audio level, etc.), averaging for analysis
- Event logging, enhanced messaging and alarming mechanizm
- Managing repository of local encodings stored on HDD
- Mapping of encoders / decoders, EDBoX-Master for management of EDBoX clusters.

EDBoX 1000 SD AVC Encoder Main Features:

Video Encoding Features:

- >MPEG-4 part 10 (H264) SD encoding
- > 4:2:0 and **4:2:2*** encoding
- > Main & high profile up to level 4 (MP@L4)
- > Simultaneous multi-coding MPEG2 SD encoding*
- >Constant and variable bit rate encoding up to 15Mbps (25Mpbs MPEG2)
- > Bit rate on-the-fly change **within 100ms**
- > SD SDI and CVBS INPUT (PAL, NTSC)
- > Resolution up to Full D1 (720x576, 640x480)
- > Aspect ratios 4:3 and 16:9
- > Pre-process and pre-analysis with 3.2 pull-down inversion
- > Noise reduction with **8 levels**, input de-blocking filtering
- > Adaptive motion compensated temporal filtering
- > MBAFF
- > CABAC/CAVLC entropy encoding
- > Custom GOP size, I, P and B frames, adaptive B-frames
- > Weighted Prediction
- > DVB over IP output, RTP/RTSP, TS over RTP
- > Unicast and Multicast

Audio Encoding Features:

- > SDI embedded (8 CHA)
- > AES/EBU 1 CHA (2 CHA*)
- > Analog Audio +6db (2CHA)
- > Audiochannel level changes
- > MPEG-1 LayerII
- > AAC LC / AAC-HEv1 / AAV-HEv2
- > LATM support
- > Dolby digital® pass through
- > Dolby digital® AC3 (6CHA*)

Encoding Extras:

- > Transcoding SPTS/MPTS MPEG-2 to H.264 AVC*
- > DVB ASI in/out*
- > Hard-disk store (up to 250GB)
- > Store and forward* (streaming higher bitrate over lower network incl. buffering)
- > IP forwarding to different unicast and multi-cast adresses in real time
- > Extensive low latency streaming < 400ms
- > Video input preview screenshots on stand-alone web interface
- > Automatic input format detection and switching
- > Upscale and downscale of video input in realtime *

EDBoX 1000 AVC Encoder-Decoder Bundle:

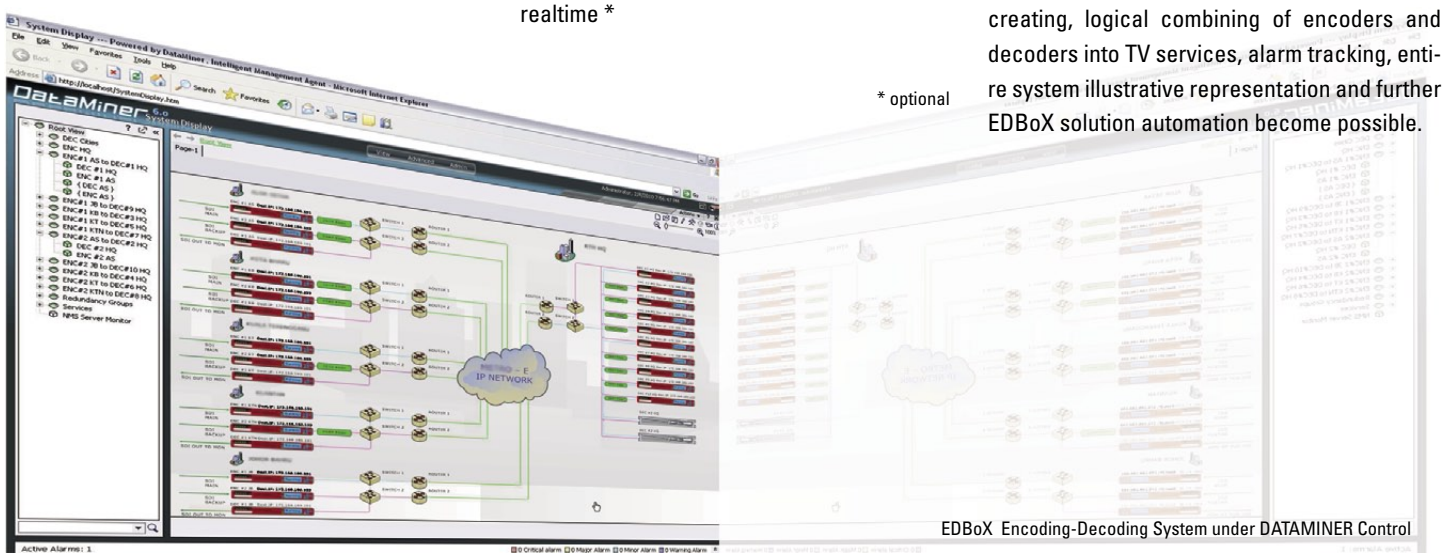
For efficient administration the EDBoX Encoder can be bundled with EDBoX Decoder. EDBoX „bundling" brings useful features like autoscan for signal by decoder, autostart of decoder the same time encoder is started, instantaneous access to decoder's web-interface from the encoder and vice-versa.

EDBoX Encoders and Decoders can be fully controlled both remotely and locally.

Local Control of EDBoX units exercised by 4-line front panel interface. For administration and streaming out two 1 GB Ethernet ports are available.

The Remote control can be performed in two ways. Any EDBoX Unit is accessed via http, and the user friendly EDBoX Website. In addition, EDBoXes completely manageable over SNMP protocol.

Integration with DATAMINER NMS system is an ultimate advantage of our products. Great opportunities like: fail-over scenarios executing, encoders -decoders redundancy groups creating, logical combining of encoders and decoders into TV services, alarm tracking, entire system illustrative representation and further EDBoX solution automation become possible.



* optional

EDBoX Encoding-Decoding System under DATAMINER Control

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