HD ENCODER + ASI TRANSCODER



2 channel HD Encoder + ASI Transcoder + IP streamer is professional HD audio / video encoding and multiplexing device. It has 2 HDMI / 2 SDI / 2 CVBS / 2 ASI inputs, supports MPEG-2 (HD/SD) / MPEG-4 AVC / H.264 (HD/SD) compression algorithms, and has 4 IP + 2 ASI outputs.

HD Encoder + ASI Transcoder + IP streamer is multifunctional professional studio/head-end device with integrated **MPEG-4 / MPEG-2** digital compression algorithms. It has 2 independent encoders / transcoders with **2** SD / HD **SDI, HDMI, CVBS, ASI** inputs and can be used both as part of IP TV (**4 IP** outputs MPTS / SPTS) and as a part of head-end station.

Operative modes:

- H.264 / MPEG-2 Encoder with 2 SDI / CVBS / HMDI inputs
- 2 ASI TS transcoder

The HD Encoder is designed to encode SD / HD **HDMI / SDI / CVBS** signals to MPEG-4 / AVC (MPEG-4 Part 10) standard, which corresponds to ITU-T H.264 standard and the ISO / IEC MPEG-4 Part 10 standard and MPEG-2 standard. In HD and SD modes the encoder can work with the High Profile and MAIN Profile from Level 1 to 4.2.

Using our encoder it is possible to receive simultaneously the same encoded / transcoded programs of high and low resolutions for mobile broadcasting or Internet broadcasting in the output stream.

The mode of "encoder/transcoder" is set in management software.

4 IP and **2 ASI** outputs settings of HD Encoder + ASI Transcoder:

- either you set one of input encoded channel to the one output (SPTS)

- or set multiplex – MPTS stream – included both encoded channels.

Transcoding of SD/HD programs in the ASI input streams:

- MPEG-2 (SD/HD) -> MPEG-2 (SD);
- MPEG-2 (SD/HD) -> H.264 (SD/HD);
- H.264 (SD/HD) -> H.264 (SD/HD);
- H.264 (SD/HD) -> MPEG-2 (SD).

Digital to digital decode and re-encode with minimum loss in video quality.
Supports multi-bitrate transcoding.
In the transcoder mode, you can enable an additional channel. Thus, there are 4 transcoded programs (2 transcoded programs from each transcoder) will be in the output stream.

There is integrated **color-bar generator with the sound** in HD Encoder + ASI Transcoder. It can be enabled and disabled in control software.

The one more feature which is most important is ability to work with low signal delay up to 100 ms (low delay mode (optional)).

KEY FEATURES:

- Transcoding of an SD/HD program
- The possibility of 2 audio channels transferring in the first coder
- Supports OTA, EPG, DVCrypt CAS 3000/10000/100000 subscribers in transcoder
- 2 HDMI / 2 SDI / 2 CVBS / 2 ASI inputs
- Software input signals switching
- Maximum output bitrate of 15 Mbit/s per channel
- IP outputs. 4 independent addresses. RTP, UDP protocols, multicast, unicast
- Overlaying titles on the input signal
- High Profile and Main Profile modes
- Encoding: MPEG-2 HP@HL, MP@HL , MP@ML; MPEG-4 H.264 HP@L4, MP@L3
- Transcoding: MPEG-2 -> MPEG-4, MPEG-2 -> MPEG-2, MPEG-4 -> MPEG-2, MPEG-4 -> MPEG-4
- Selectable MPEG-2 SD or H.264 SD/HD real-time video encoding
- User selectable resolution and bitrate
- The ability to upgrade via Ethernet

- The ability to enable the test signal (color-bar generator) with the sound

Input	
Audio inputs	4×XLR, 1×HDMI, 2×SDI
Video inputs	2×SDI or 2×CVBS, 2×HDMI and 2×ASI
Video:	
Resolution	1080i@60; 1080i @59.94; 1080i @50; 576i @50; 480i @59.94
Encoding	MPEG-2 HD/SD; MPEG-4 AVC/H.264 HD/SD
Bitrate	1Mbps~15Mbps (optional 0.5 Mbps~15Mbps)
Rate Control	CBR/VBR
GOP Structure	IPB, IBBP, IPPP
Aspect Ratio	SD – 4:3; 16:9; HD -16:9
Chroma Format	4:2:0
Output	
Outputs	2 ASI, 1 10/100 Base-T Ethernet
Video:	
Resolution	1920×1080, 1440×1080, 960×1080, 720×1080, 1280×704, 1280×768, 1024×768, 720×576, 704×576, 544×576, 480×576, 720×480, 704×480, 640×480, 544×480, 480×480, 480×256, 320×224, 240×180
Encoding	MPEG-2/H.264; H264/MPEG-2 (optional H.264/H.264; MPEG-2/MPEG-2)
Bitrate	0.5 -15 Mbps
Aspect Ratio	4:3; 16:9

Audio:	
Encoding	MPEG-1 Layer II, Audio output level adjustment +6/-6.7 db
Sampling rate	48kHz
Resolution	24-bit
Bitrate	64Kbps~384Kbps
Delay	less 1 sec (100ms (optional low delay mode))
Stream output	2×ASI output ports, BNC interface
	4xIP, MPTS/SPTS over UDP/RTP, 10/100 Base-T Ethernet interface (UDP/RTP multicast/unicast) Rj45 interface
Language	English-Russian
Power Supply	
Power	AC 220V±10%, 50Hz
Power Consumption	17W
Others	
Size (W×D×H)	440mm×190mm×44mm
Weight	3.5kg

Taking into consideration that we (UMT LLC) are developer and system integrator, also do not stop on our technical growth and improvement, know that view of all our devices and equipment including their technical parameters may be different from pictures presented on website and parameters listed on each device webpage. **Note!** All details customer has to confirm in advance during ordering and before payment. Those parameters that were not specified and / or were not agreed while ordering will be implemented as basic at the discretion of the manufacturer. Each our customer has 1.5 year warranty and 7 year aftersales support for whole range of our products.