



dicas2032 HD ENCODER

MPEG-4 AVC/H.264 High Definition Encoder



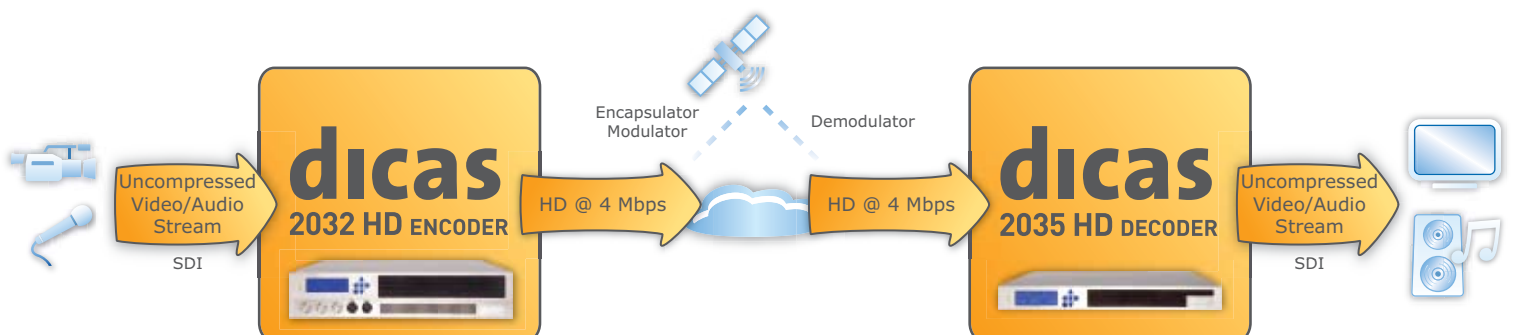
With the costs of broadband and IP VSAT satellite connectivity decreasing, outside broadcast (OB) and direct streaming from live events are becoming affordable for small companies, institutions and broadcasters. In addition to these financial considerations, streaming live video from changing locations requires robust, flexible and easy-to-use equipment.

The dicas2032 HD encoder is designed for easy plug-and-play deployment in the field. The audio and video input connectors on the front panel allow for a quick plug-in of cameras, microphones or input devices. Presets of encoding and streaming parameters such as bit rate, resolution or IP address of the receiving party can easily be activated over the front display. The extremely silent cooling and ventilation make the dicas2032 encoder the ideal appliance for environments where silence and privacy are a must, i.e. in conference rooms, concert halls, lecture auditoriums or the inside of SNG vans.

dicasFLASH PLUG-IN



dicasFlash is an optional software plug-in enabling the dicas2032 HD encoder to communicate with the latest version of Adobe's Flash Media Server 3. The dicasFlash plug-in opens an additional content distribution channel for the IPTV, Internet TV and Mobile TV industries since MPEG-4 AVC/H.264 content can be professionally delivered over RTMP to the Adobe Flash Player, which is installed on over 850 million internet-connected desktops and mobile devices worldwide.





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Connectors

Video In

- Analog Composite BNC (SMPTE 259M)
- Digital SD-SDI, BNC (SMPTE 259M)
- Digital HD-SDI, BNC (SMPTE 259M)

Audio In

- analog balanced (XLR)
- embedded SDI

Video/Audio Out

- Ethernet (10/ 100/1000 BaseT) half/full duplex

Video Input

- Number of channels: 1
- SDTV: NTSC (M), PAL (B, D, G, H, I, K, M and N)
- HDTV: 720p/60/59.94/50, 1080i and p/30/29.97/25/24

Video Output

- Number of streams: 1
- SDTV: NTSC (M), PAL (B, D, G, H, I, K, M and N)
- HDTV: 720p/60/59.94/50, 1080i and p/30/29.97/25/24

MPEG-4 AVC/H.264

- Baseline, Main and High Profile Levels 1, 1b, 2, 3, 4
- I-, P- and B-slices
- Intra Prediction all modes,
- Inter prediction all block sizes
- ¼ pixel motion estimation/compensation
- Progressive and interlaced coding (PAFF, MBAFF)
- De-Interlacing prefilter
- De-blocking filter
- CABAC/CAVLC
- 4x4 and 8x8 transform

Coding Parameters

- Adjustable video bit rate 48 kbps - 20 Mbps
- Adjustable frame rate 5 - 60 fps
- Adjustable audio bit rate 16 - 384 kbps
- Adjustable audio sample rate 8 - 48 kHz
- Audio signal amplifying

Resolution Conversions

- | | |
|----------------------|--------------------|
| • QCIF (176x112/144) | • 192 x 112 (16:9) |
| • QVGA (320x240) | • 320 x 176 (16:9) |
| • ½ D1 (352x480/576) | • 432 x 240 (16:9) |
| • CIF (352x288/240) | • 512 x 288 (16:9) |
| • 2CIF (704x288) | • 688 x 384 (16:9) |
| • 4CIF (704x576) | • 960 x 720 |
| • 480 x 576/480 | • 1280 x 720 |
| • D1 (704x576/480) | • 960 x 1080 |
| • SD (720x576/480) | • 1280 x 1080 |
| | • 1920 x 1080 |

Video Processing

- De-blocking filter
- Scene-cut detection
- Logo insertion
- Adaptive I-frame and B-frame insertion
- Adjustable key-frame period including I-frame only
- Adjustable and fixed GOP size
- Rate Control: capped variable bit rate
- Rate Control: variable bit rate (VBR)
- Rate Control: average bit rate (ABR)
- Adjustable video buffer size (VBV mode)
- Frame accurate time stamps

Transport

- MPEG Transport Stream over UDP (pure IP)
- MPEG Transport Stream over RTP
- Direct Media over RTP/UDP
- RTP with configurable packet size
- RTMP (Flash) Sender (optional)
- Session management over RTSP or HTTP
- SDP file
- 2D forward error correction (Pro-MPEG CoP3v2)
- Multicast and Unicast over IP
- IPv4 support
- SAP

Dimensions & Power

- Dimension: 436mm (19") x 411mm (16.2") x 90mm (WxDxH)
- Weight: 10.10 kg (22.27 lbs)
- Power Supply: 110-240 V
- Power Consumption: 200 W
- Air flow: Front to back

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