



dicas2030 HD ENCODER

MPEG-4 AVC/H.264 High Definition Encoder



The dicas 2030HD is a professional broadcast-quality advanced video/audio encoding and streaming solution. This high-performance 1-RU solution is featuring next generation MPEG-4 AVC/H.264 compression technology delivering bit rates twice as low as competing video codecs.

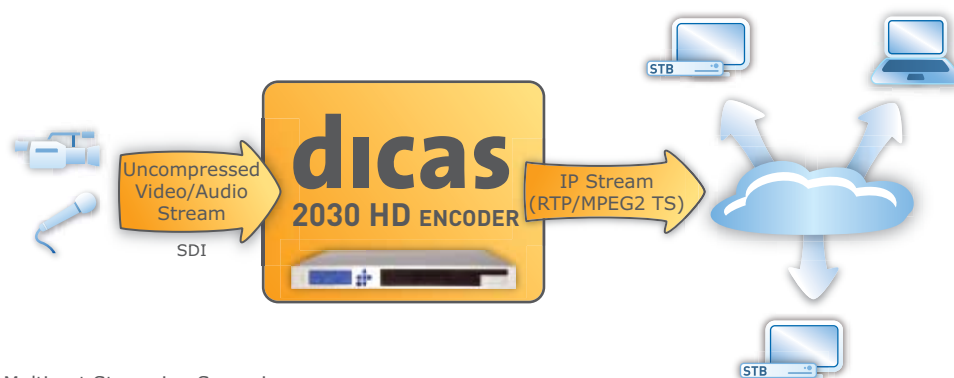
The dicas2030 HD encoder is the perfect choice for service providers who need to contribute or distribute optimal HD video quality in spite of limited bandwidth capacities. With the dicas2030 HD encoder IPTV and WebTV operators secure a competitive advantage by offering full-HD services in unmatched picture quality at bit rates of 2.5 Mbps and below.

The dicas2030 HD encoder delivers one HD (720p, 1080p or 1080i) channel of MPEG-4 AVC/H.264 video and MPEG-4 audio via RTP/UDP and MPEG-2 TS/UDP.

dicasFLASH PLUG-IN



dicasFlash is an optional software plug-in enabling the dicas2030 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.



Multicast Streaming Scenario



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Connectors

Video In

- Analog Component BNC (SMPTE 259M)
- Digital SD-SDI, BNC (SMPTE 259M)
- Digital HD-SDI, BNC (SMPTE 259M)
- HDMI (without HDCP) (optional)

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 45mm (WxDxH)
- Weight: 7.66 kg (16.89 lbs)
- Power Supply: 110-240 V
- Power Consumption: 200 W
- Dual Power Supply (200 W) (optional)
- Air flow: Front to back

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