



dicas2010 SD ENCODER

MPEG-4 AVC/H.264 Standard Definition Encoder



The dicas 2010 is a professional broadcast-quality advanced video/audio encoding and streaming 1-RU solution. This sophisticated, high performance encoder convinces with an outstanding picture quality at lower bit-rates and highest reliability for 24/7 usage.

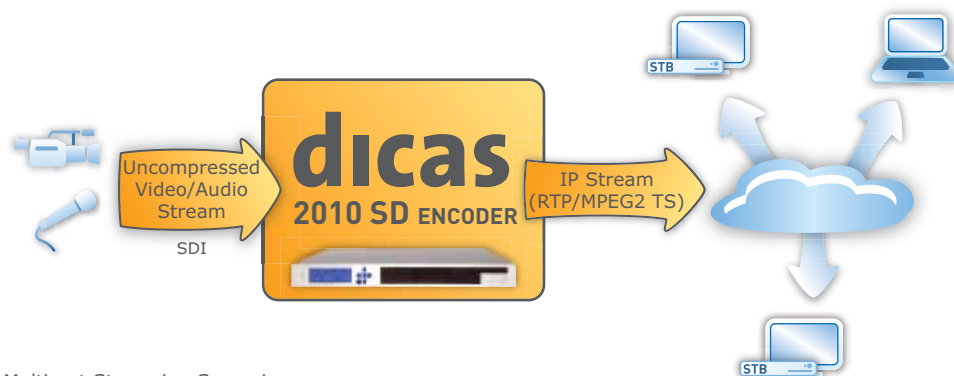
Optimised for both interlaced and progressive display systems the dicas2010 delivers one SD channel of variable bit rate (VBR), capped variable bit rate or average bit rate (ABR) MPEG-4 (Simple Profile, Advanced Simple Profile) or MPEG-4 AVC/H.264 (Baseline, Main and High Profile) video at various resolutions from QCIF (176x144) to SD.

The dicas 2010 is designed for broadcasters, operators and enterprises delivering IPTV, WebTV and streaming services as well as for broadcast distribution and contribution. The dicas2010 is interoperable with IP satellite encapsulators and modulators.

dicasFLASH PLUG-IN



dicasFlash is an optional software plug-in enabling the dicas2010 SD 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 Composite BNC (SMPTE 259M)
- Analog Component BNC (SMPTE 259M)
- Digital SD-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)

Video Output

- Number of streams: 1
- SDTV: NTSC (M), PAL (B, D, G, H, I, K, M and N)

MPEG-4

- MPEG-4 Simple Profile (SP) levels 0 (SVPL0), 0b, 1-3
- MPEG-4 Advanced Simple Profile (ASP) levels 1-5
- I/P/B-VOP
- AC/DC Prediction
- 4-Motion Vector
- ¼ pixel estimation/compensation
- Error resilience tools (data partitioning, video packets)
- Interlaced coding

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

Resolution Conversions

- QCIF (176x112/144)
- QVGA (320x240)
- ½ D1 (352x480/576)
- CIF (352x288/240)
- 2CIF (704x288)
- 4CIF (704x576)
- 480 x 576/480
- D1 (704x576/480)
- SD (720x576/480)

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 or 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

Coding Parameters

- Adjustable video bit rate 48 kbps - 8 Mbps
- Adjustable frame rate 5 - 30 fps
- Adjustable audio bit rate 16 - 384 kbps
- Adjustable audio sample rate 8 - 48 kHz
- Audio signal amplifying

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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