Sivac - one COMPACT



UHD 4K HEVC PORTABLE ENCODER & DECODER SOLUTION



Sivac-one COMPACT is a robust broadcast quality encoding/decoding solution designed in a portable, low weight, **very low consumption** platform to perfectly fit in most demanding live video applications where **simplicity**, **reliability** and **low-latency** are the key requirements.

Sivac-one COMPACT is a real-time **HEVC/H.265** video encoder/decoder that can process a 2160p50/60 **4K UHD** video source (**HDR, WCG**) or up to 4x 1080p50/60 FHD with 10-bit pixel depth, 4:2:2/4:2:0 chroma and up to 16 channels of digital audio embedded (stereo).

Sivac-one COMPACT offers in addition to a robust and reliable video transport, a latency as low as <150ms (End to End), which makes it an ideal solution for interactive video applications such as field sports contribution, live events, Broadcast news or remote production.

Sivac-one Compact offers the versatility of being configured as **Encoder or Decoder**, and a wide range of interfaces to adapt to different needs: 12G/4x3G/HD/SD-SDI, ASI and IP UDP/RTP with **FEC SMPTE 2022-1/2/7** (Multi/Unicast).



KEY FEATURES

- Encoder or Decoder configuration
- 1xUHD (4K) channel or Up to 4x FHD/HD/SD
- 4x3G or 12G-SDI (UHD mapping ST425)
- HDR, WCG, SMPTE 2022-1/2/7
- ETR-290 Measurement (Decoder)
- Easy operation through intuitive WEB GUI

APPLICATIONS

- Live Event Contributions
- Remote Production encoding
- Broadcast News
- Low latency video transport

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TECHNICAL SPECIFICATIONS

VIDEO INTERFACES (SDI)

Num.: $4 \times BNC 75 \Omega$

Formats:

12G-SDI (SMPTE 2082): 2160p50/59.94/60

3G-SDI (SMPTE 424M): 1080p50, 1080p60, 1080p59.94

HD-SDI (SMPTE 292M): 1080 i25/i29.94/ i30, 720p50, 720p59.94, 720p60

SD-SDI (SMPTE 259 M): 625/25Hz, 525/29.97Hz

UHD mapping: SMPTE 425-1 Level A and Level B (2 Sample Interleave (2SI) or 4 quadrants)

HDR: HLG10 Backward Compatible, HLG10, HDR10, PQ10.

WCG: BT.2020, BT.709

EMBEDDED AUDIO

Num.: Up to 8 PID (Stereo) (1x UHD)

Up to 16 PID (Stereo) (4x SD/HD/FHD)

VIDEO ENCODING / DECODING

Formats and profiles

 $1x\,\text{HEVC}$ UHD Channel: $\,4:2:2\,\&\,4:2:0,\,8$ and 10 Bit

[HEVC Main10/8@L6 & Main 422@L6]

4x HEVC SD/HD/FHD Channels: 4:2:2 & 4:2:0, 8 and 10 Bit

[Up to H.265 Main10 422@L4]

Resolutions

Up to 3840 x 2160 in UHD Up to 1920 x 1080p in HD

AUDIO ENCODING / DECODING

MPEG-1 Layer II (ISO/IEC 11172-3)

MPEG-4 AAC (LC/HE v1, HE v2)

Pass-through Dolby Digital (AC3) and Dolby Digital Plus (EAC3)

PCM and SMPTE 302M (Pass-through) 16/20/24 Bits

ASI/IP INTERFACES

Video over IP

Num.: 2 x RJ-45

Interface: 2 x 10/100/1000 Mbps

Encapsulation: TS over IP: UDP, RTP with FEC SMPTE

2022-1/2/7(*) (Multicast/Unicast) , Connection control

2 simultaneous flows

ASI output interface: 2 x HD-BNC (188 bytes TS)

SOFTWARE OPTIONS

Video encoding / decoding

Number of channels and coding mode:

- 1x UHD Encoding / Decoding
- Up to 4x FHD/HD/SD Encoding / Decoding

Additional Audio PID License

4xPID MPEG-1LII and MPEG-4 AAC

Dolby Digital (AC3) and Dolby Digital Plus (EAC3) (*)

Scrambling: BISS -1/E

Logo insertion: Format: bmp image with alfa channel (transparency)

X-Y axis. Time interval, visible time

PHYSICAL CHARACTERISTICS AND CONTROL

System Management

Full configuration by webpage and REST FULAPI and SNMP Traps

Power

2 DC Power inputs supporting redundancy

Voltage : 12 VDC Typical consumption: <35 W

Dimensions: 375mm x 158mm x 43mm
Weight: 1.4 Kg (excl. external power supply)

Operating Temp.: 5ºC to 40ºC

(*) Check availability / Road map

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