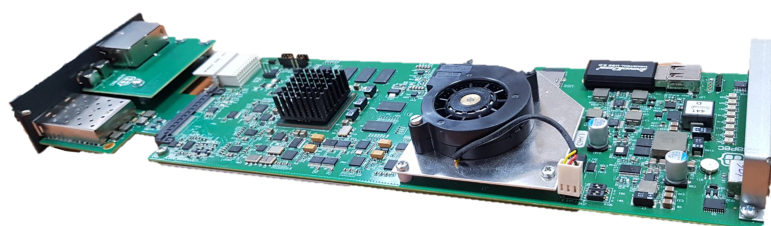


Sivac-One Media Processor (SMP1000) is a low consumption and very low latency HEVC module, developed for the two Sivac-One available frames: Sivac-One Frame (Up to 3x SMP1000) and Sivac-One Compact (Portable solution (1x SMP1000)).

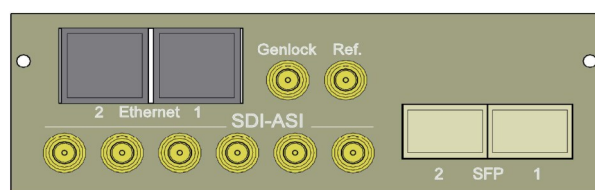
SMP1000 module is a real-time **HEVC/H.265** video encoder / decoder solution that can be configured as 1x 2160p50/60 **4K UHD (HDR, WCG)** channel or 4x FHD/HD/SD channel. In both cases with 8/10-bit pixel depth, 4:2:2/4:2:0 profiles and up to 16 embedded stereo audio channels per SMP1000 module.

SMP1000 provides a reliable video transport with glass-to-glass latency below 170 ms, which makes it an ideal solution for interactive video applications such as field sports contribution, live events, Broadcast news or remote production.

SMP1000 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** (Multicast/Unicast) and **SRT** (Caller/Listener/Rendezvous) modes.



SMP1000 module with backplane



SMP1000 module backpanel

FEATURES

- Configurable as Encoder or Decoder
- 1xUHD (4K) channel or Up to 4x FHD/HD/SD
- 4x3G or 12G-SDI (UHD mapping ST425)
- HDR (HLG10, PQ/HDR10) - WCG (BT.709/2020)
- ETR-290 Measurement (Decoder)
- Transporte SMPTE 2022-1/2/7 - SRT

APPLICATIONS

- Integrable in Sivac-one Compact or Sivac-One Frame
- Low latency HEVC Contributions
- Remote Production encoding
- Live Events

Sivac - one Media Processor (SMP)

TECHNICAL SPECIFICATIONS

VIDEO INTERFACES (SDI)

Num. : 6 x HD-BNC 75 Ω

Video Interface:

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

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

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

ASI Interface: (188 bytes TS)

SFP:

Electrical/optical

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

6G-SDI (SMPTE 2081): 2160p25/29.97/30

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 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@L5.1/L5.2]

UHD Mapping: SMPTE 425-1 Level A (2 Sample Interleave (2SI) o 4 Quadrants)

HDR: HLG10 Backward Compatible, HLG10, HDR10, AUTO (SMPTE 356)

WCG: BT.2020, BT.709, AUTO (SMPTE 356)

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)

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

PCM and SMPTE 302M (Passthrough) 16/20/24 Bits

IP INTERFACES

Video over IP

Num.: 2 x RJ-45

Interface: 2 x 10/100/1000 Mbps

Encapsulation: **SMPTE 2022-1/2/7(*)** TS over IP : UDP, RTP FEC

(Multicast/Unicast) , Connection Control

SRT (License) (Caller, Listener, Rendezvous).

Session ID; Bonding (Broadcast—Active/Passive)

Up to 8 simultaneous flows (4x TSolP per interface)

SOFTWARE OPTIONS

Additional Audio PID License

4x MPEG-1LII and MPEG-4 AAC

Scrambling: BISS -1/E

PHYSICAL CHARACTERISTICS AND CONTROL

System Management

Full configuration by webpage and REST FUL API and SNMP Traps

Power

Voltage Range: Defined by the frame where SMP1000 is integrated

Typical consumption: < 25 W

Dimensions: Eurocard extended 280x100 mm

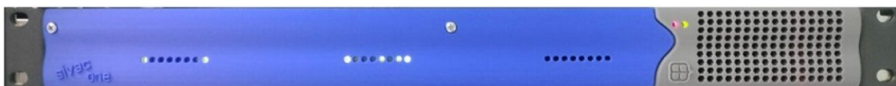
Weight: < 0.3 Kg

Operating Temperature: 5°C to 45°C

(*) Optional. Contact factory.

www.sapec.es

Frames available for SMP1000



Sivac-One Frame

Modular Frame that can allocate up to 3 x SMP1000:

- Up to 3x UHD HEVC Channels in 1U
- Up to 12x FHD/HD/SD HEVC Channels in 1U



Sivac-One Compact

Portable Solution based in 1x SMP1000 module