

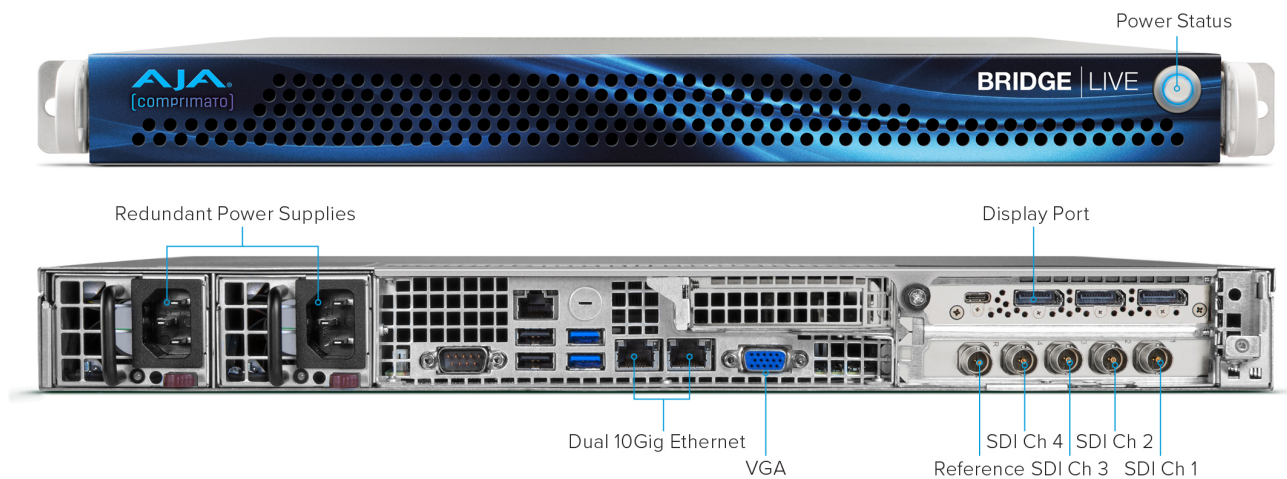


BRIDGE LIVE

BRIDGE LIVE is a turnkey solution built for critical streaming applications with high performance 12G-SDI video encoding/decoding, stream-based transcoding, flexible I/O, comprehensive metadata support, closed caption support and all within a compact 1RU form factor with redundant power supplies.

Designed with the ability to support both low-latency and high-quality workflows across a range of codecs, containers, and protocols, BRIDGE LIVE enables numerous use cases; multi-input live streaming to platforms such as YouTube, Facebook, or Twitch, providing high quality reference video for remote collaboration in production and post, backhauling remote live SDI video sources to the media production facility, SDI to MPEG-TS conversions for Telcos/IPTV/Cable networks, through to encoding for content distribution with ABR ladder profiles or hand-off for OTT packaging, and all supported via public internet.

<https://www.aja.com/products/bridge-live>



Video Formats

- (UltraHD) 3840 x 2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (2K) 2048 x 1080p 23.98, 24, 25, 29.97, 30, 47.95, 48, 50, 59.94, 60
- (HD) 1080i 50, 59.94, 60
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 625i 50

- (SD) 525i 59.94
- YCbCr, 4:2:2, 10-bit

Video Codec Color Component Sampling

- 4:2:2, 10-bit/8-bit
- 4:2:0, 10-bit/8-bit

Video Codecs

- H.264 (AVC, MPEG-4)
- H.265 (HEVC)
- JPEG 2000 (VSF TR 01)
- MPEG-2

Audio Streams/Codecs

- AAC
- AC3
- E-AC3 (input)
- MPEG-2 Audio
- Uncompressed PCM (multi-channel), SMPTE 302M-2007

Metadata

- Closed Captioning (EIA-608/708)
- Line 21 Captions
- Metadata pass-through
- MPEG-2 ancillary packet support, SMPTE 2038
- SCTE-35, SCTE-104 (pass-through)
- Subtitles embedded within H.264 SEI messages
- Electronic program guide (EPG) on input

Containers and Protocols

- HLS (input)
 - AVC TS segments
 - Fragmented MP4
- MPEG-TS
- MPTS (input)
- RTMP/RTMPS (output)
- RTP, UDP
- SRT (including encryption)
- VSF-TR01

Video Processing

- Auto Color Component Sampling based on I/O settings
- Cropping / Padding
- Color adjustments
- Deinterlacing
- Frame rate 50% down-conversion (60p->30p, 59.94->29.97, 50p->25p)
- Frame rate up-conversion (50i->50p)
- Logo insertion
- Resizing

Audio Processing

- Channel Remapping
- Gain
- Sample Rate conversion

Synchronization

- Input PCR
 - Global configuration (in separate transport stream)
 - Local configuration (in each transport stream)
- Output PTS

- Pass-through
- Add offset to input PTS

Performance

- Stream startup time maximum 5 seconds after configuration applied
- Latency down to sub 150ms input to output (based on codec and other parameters)
- Up to 4 simultaneous primary HD streams, plus additional output variations per stream*
- Up to 1 primary UltraHD stream, plus additional output variations of that stream*

*Final additional stream count per output is dependent on configuration

Video Input Digital

- 12G-SDI, SMPTE-2082, 10-bit
- 6G-SDI*, SMPTE-2081, 10-bit
- 3G-SDI, SMPTE-424, 10-bit
- 1.5G-SDI, SMPTE 292M, 10-bit
- 270 Mbit/s SDI, SMPTE 259M-C, 10-bit

*UltraHD 30p supported, no other SMPTE-2081 support at this time

Video Output Digital

- 12G-SDI, SMPTE-2082, 10-bit
- 6G-SDI*, SMPTE-2081, 10-bit
- 3G-SDI, SMPTE-424, 10-bit
- 1.5G-SDI, SMPTE 292M, 10-bit
- 270 Mbit/s SDI, SMPTE 259M-C, 10-bit

*UltraHD 30p supported, no other SMPTE-2081 support at this time

Audio Input Digital

- 16-channel, 16 and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous per SDI connection

Audio Output Digital

- 16-channel, 16 and 24-bit SDI embedded audio, 48 kHz sample rate, synchronous per SDI connection

Configuration and Monitoring

- Local "Kiosk" interface (keyboard, mouse and monitor)
- Remote access via Browser
- REST API
- SNMP

Form Factor

- 1RU turnkey system
- 4x full size BNC (12G/6G/3G/1.5G-SDI compatible)
- 2x 10GigE
- Local interface via Display Port and USB
- OS custom image
- Updates and licenses via download

Size (w x d x h)

- 17.2" x 16.9" x 1.7" (436.88 x 429.26 x 43.18 mm)

Weight

- 28 lb. (12.7kg) in box



- 18 lb. (8.2kg) server only

Power

- 100-240 VAC 50/60 Hz (Dual, redundant power supplies)
- 190W typical, 245W Maximum

Environment

- Safe Operating Temperature: 5 to 35 C (41 to 95 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 8-90% noncondensing
- Nonoperating Relative Humidity: 5-95% noncondensing