

BRIDGE NDI® 3G

BRIDGE NDI 3G is a 1RU gateway offering high density conversion to and from 3G-SDI to NDI and NDI to 3G-SDI for both HD and 4K/UltraHD. Designed to drop into any existing NDI or SDI workflow as a plug and play appliance, easy to deploy and administer.

$16065 US MSRP

BRIDGE NDI 3G brings immense conversion power and flexibility, fully controllable remotely for AV use, security and surveillance, broadcast, eSports, entertainment venues and a wide range of other facilities needing high quality, efficient NDI encode and decode. Set and forget, or use more dynamically as project needs dictate.

https://www.aja.com/products/bridge-ndi-3g

Video Formats

- (4K) 4096x2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (UltraHD) 3840x2160p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080p 23.98, 24, 25, 29.97, 30, 50, 59.94, 60
- (HD) 1080i 50, 59.94, 60
- (HD) 720p 50, 59.94, 60
- (SD) 525i 59.94, 625i 50

Video Codecs

- NDI
- NDI HX (input only)

Audio Streams/Codecs

- NDI (uncompressed float)
- SDI (PCM)

Color Component Sampling, Color Space, and Bit Depth

- SDI
  - YCbCr, 4:2:2, 10-bit
- NDI
  - UYVY, 4:2:2, 8-bit
  - UYVA, 4:2:2, 8-bit
  - P216, 4:2:2, 16-bit (output only)

Video Processing

- Scaling
- Letterbox/Pillarbox
- Video/Key Pair (2x SDI to 1x NDI + Alpha, or, 1x NDI + Alpha to 2x SDI)
- Reclocking for integer/fractional rate conversion

Audio Processing

- Audio reference level per video channel / group (up to 16 audio channels)
- Sample Rate conversion

Performance

- Up to 16x HD (NDI/SDI)
- Up to 4x 4K (NDI/SDI)
- Ultimate performance based on network conditions, concurrent video processing, and other parameters

NDI Video Input

- NDI (approx. 100–250Mbit/s)
- NDI HX (approx. 8-20Mbit/s)

NDI Video Output

- NDI (approx. 100–250Mbit/s)

SDI Video Input Digital

- 3G-SDI, SMPTE-424, 10-bit
- 1.5G-SDI, SMPTE 292M, 10-bit
- 270Mb-SDI, SMPTE 259M-C, 10-bit

SDI Video Output Digital

- 3G-SDI, SMPTE-424, 10-bit
- 1.5G-SDI, SMPTE 292M, 10-bit
- 270Mb-SDI, SMPTE 259M-C, 10-bit

NDI Audio Input

- Up to 16-channel, uncompressed float, 48 kHz sample rate, per NDI connection

NDI Audio Output

- Up to 16-channel, uncompressed float, 48 kHz sample rate, per NDI connection

SDI Audio Input Digital

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

SDI Audio Output Digital

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

Reference

- Dual Analog Color Black or HD Tri-level sync

Timecode

- VITC1, VITC2, LTC (embedded), Time-of-Day

Network Mode

- Unicast for each RX requesting a stream, TX to replicate the same stream, can impact TX performance if too many RXs request source

Configuration and Monitoring

- NDI 5.5 or NDI 4 library can be used via interface toggle
- Browser via network attached client system
- Local “Kiosk” interface via monitor (VGA), keyboard, and mouse (not included)
- Local Dual Channel Audio via USB sound card (included)
- REST API

Form Factor

- 1RU turnkey system
- 18x Din 1.0/2.3 BNC: 16SDI I/O, 2Ref (3G/1.5G-SDI compatible)
- 2x 10 GigE
- Local interface via VGA and USB
- OS custom image
- Updates 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