



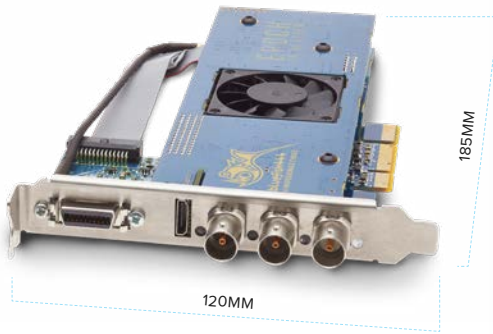
EPOCH NEUTRON

DATA SHEET

DELIVER THE HIGHEST QUALITY 2K/HD VIDEO WORKFLOWS
WITH EPOCH | NEUTRON VIDEO I/O CARDS

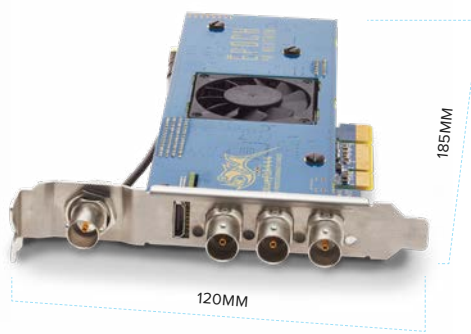
EPOCH NEUTRON

Part No. EB3007C



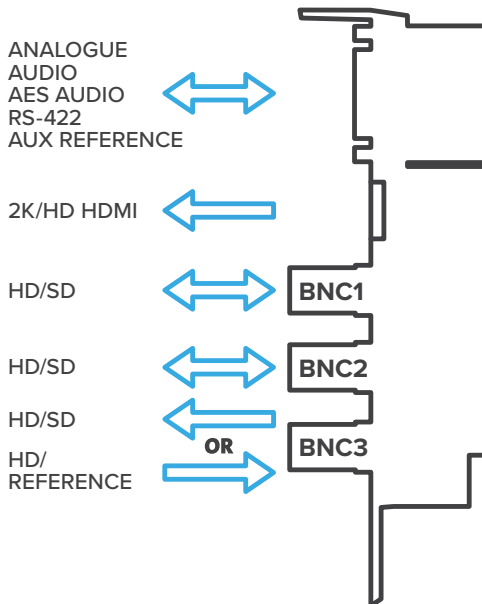
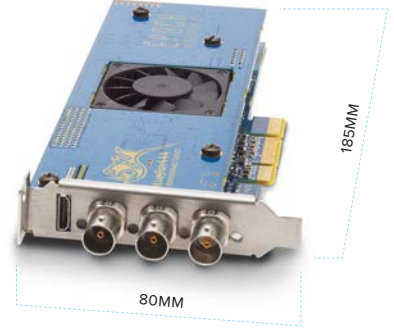
EPOCH NEUTRON

Part No. EB3007B



EPOCH NEUTRON

Part No. EB3007F



FEATURE	EPOCH NEUTRON
SD-SDI	2
1.5G HD-SDI	3
3G-SDI (Level A+B)	NO
Dual Link 1.5G (4:2:2:4/4:4:4:4)	YES
Dual Link 3G (Level A+B)	NO
Quad Link 1.5G	NO
Quad Link 3G (Level A+B)	NO
2K/HD/SD HDMI (Output)	YES
UHD HDMI (Output)	NO
Low-latency hardware keyer	YES
Multi-card support	YES
Colour space converter	YES
Customisable pixel formats	YES
Dedicated Reference Input	YES*
Breakout cable	YES^

*Available on model EB3007C only. ^Available on model EB3007C only. Additional shield available on request for low-profile model.



SPECIFICATIONS	EPOCH NEUTRON	EPOCH NEUTRON LP
Width	120MM	80MM
Length	185MM	185MM
Internal Clearance (L)	169MM	169MM
Height	1 PCIE SLOT	1 PCIE SLOT
Weight	220G	180G

VIDEO I/O		
SDI VIDEO		
SD SMPTE 295M		2
HD 1.5G SMPTE 292M		3
3G (Level A+B) SMPTE 424M		3
Dual Link 1.5G SMPTE 372M		YES
Dual Link 3G		NO
Quad Link 1.5G SMPTE 2036-1		NO
Quad Link 3G SMPTE 2036-1		NO
Maximum Video Channels		4
12/10/8-bit 4:4:4:4 SDI		YES
12/10/8-bit 4:2:2:4 SDI		YES
HDMI OUTPUT		
2K/HD/SD		YES
4K DCI (4096x2160p) @ 24 fps		NO
UHD (3840x2160p) @ 24, 25, 29, 30 fps		NO
REFERENCE		
Bi-Level/Tri-Level Reference Input		YES
Bi-Level/Tri-Level Reference auxiliary Input (Dedicated BNC)		YES [^]
Bi-Level/Tri-Level Reference auxiliary Input (Via Breakout Cable)		YES [^]
Interlocking I/O supporting Epoch Neutron and KRONOS cards		YES

ANCILLARY		
HANC		
RP 188 timecode		YES
16 channels of embedded audio per SDI		YES
Video payload ID		YES
Custom packets		YES
VANC		
Closed captioning		YES
3 line VITC		YES
Custom packets		YES

AUDIO I/O		
AUDIO SIGNALS		
16 channels of embedded audio Input per SDI		YES
8 channels of AES ID3 Input (unbalanced, BNC)		YES [^]
16 channels of embedded audio Output per SDI		YES
8 channels of AES ID3 Output (unbalanced, BNC)		YES [^]
2 channels -10DBU analogue Output (unbalanced, RCA)		YES [^]
Dolby Digital pass-through SDI		YES

HARDWARE	
MAJOR HARDWARE FEATURES	
High-performance, bypass relays	YES
Fully programmable 4 x 4 x 33-bit colour matrix	YES
12-bit video signal path throughout	YES
Automatic cross-locking and intelligent output phasing across formats	YES
Audio sample-rate converters	YES
(MR ²) Master Routing Resource	YES
ISIM (Input Stream Integrity Management)	YES
4-lane PCI-Express (8 and 16 lane compatible)	YES
Full-duplex DMA data transfer bandwidth 1.1GB/s	YES
256MB on-board memory	YES
Hardware downstream keyer	YES
LTC I/O BNC	NO [^]
RS-422 serial port (Via breakout cable)	YES [^]

VIDEO FORMATS	
SUPPORTED YUV SDI VIDEO MODES	
(2K) 2048x1080p/PsF @ 23.976, 24, 25, 29.97, 30 fps	YES
(2K) 2048x1080p/PsF @ 48, 50, 59.94, 60 fps	YES (DL)
(HD) 1920x1080p/PsF @ 23.976, 24, 25, 29.97, 30 fps	YES
(HD) 1920x1080p/PsF @ 48, 50, 59.94, 60 fps	YES (DL)
(HD) 1920x1080i @ 25, 29.97, 30 fps	YES
(HD) 1280x720p @ 23.976, 24, 25, 29.97, 30, 50, 59.94, 60 fps	YES
(SD) 720x576i @ 25 fps PAL	YES
(SD) 720x486i @ 29.97 fps NTSC	YES
SUPPORTED RGB SDI VIDEO MODES	
(2K) 2048x1080p/PsF @ 23.976, 24, 25, 29.97, 30 fps	YES (DL)
(2K) 1920x1080p/PsF @ 23.976, 24, 25, 29.97, 30 fps	YES (DL)
(HD) 1920x1080i @ 25, 29.97, 30 fps	YES (DL)
(SD) 720x576i @ 25 fps PAL	YES (DL)
(SD) 720x486i @ 29.97 fps NTSC	YES (DL)
SUPPORTED HSDL SDI VIDEO MODES	
(2K) 2048x1556PsF @ 14.98, 15 fps	YES (DL)
SUPPORTED 4K YUV SDI VIDEO MODES	
(4K) 4096x2160p @ 23.976, 24, 25, 29.97, 30 fps	NO
(4K) 4096x2160p @ 48, 50, 59.94, 60 fps	NO
(UHD) 3840x2160p @ 23.976, 24, 25, 29.97, 30 fps	NO
(UHD) 3840x2160p @ 48, 50, 59.94, 60 fps	NO
SUPPORTED 4K RGB SDI VIDEO MODES	
(4K) 4096x2160p @ 23.976, 24, 25, 29.97, 30 fps	NO
(UHD) 3840x2160p @ 23.976, 24, 25, 29.97, 30 fps	NO
SUPPORTED PIXEL FORMATS	
2VUY, YUVS, BV8, V210, AYUV _ 4224, AYUV _ 4444, YV12, I420	YES
ARGB, BGRA, RGB24, Cineon, DPX, RGB48	YES
Custom using flexible hardware pixel format engine	YES

[^]Available on model EB3007B only, [^]Available on model EB3007C only. Additional shield available on request for low-profile model. [^]Optional shield required. DL = Dual Link (2 BNC).

CROSS-PLATFORM SUPPORT WITH INDUSTRY-LEADING 3RD-PARTY SOFTWARE



For a comprehensive and up-to-date list of supported software, visit bluefish444.com/software

Bluefish444 | Telephone: +61 3 9682 9477 | Fax: +61 3 9328 2031 | info@bluefish444.com
 For worldwide reseller and distributor contact information, please go to bluefish444.com/contacts