

STORM 3G Elite

THE MOST COMPREHENSIVE, MOST COMPLETE SIGNAL INTERFACE AVAILABLE TODAY

STORM 3G Elite is a 2 RU rack-mountable multi-I/O device, providing complete connectivity and HD/SD hardware for real-time, same frame, downconversion with real-time, full-quality, full-resolution 3G 10-bit HD-SDI, SD-SDI, DV, and HD/SD analog output from the timeline with EDIUS 6 included.



STORM™ 3G Elite consists of a breakout box with a PCIe 4X I/F card for desktop connection (4X mode: up to 1080p50/60) as well as an Express 34 card (1X mode: up to 1080i) for laptop connection. It ships with a full version of EDIUS® 6.

STORM 3G Elite provides the most comprehensive, most complete signal interface available today. Video interfaces include dual 3G SDI, which can be used as either one 3G SDI signal or one pair of high-definition and standard-definition signal outputs. Other interfaces include

1080p-capable HDMI I/O, composite (SD only), and component (up to 1080i) analog video I/O.

For audio, STORM 3G Elite has four pairs of AES/EBU interfaces (as eight BNC connectors, each accommodating eight audio I/Os up to 48 kHz, 24-bit). Another four pairs of XLR balanced audio are also available, with a stereo pair each of balanced AND unbalanced audio monitor out. A switchable line/mic (switchable phantom power) is also available for a dedicated voice-over input.

The uniqueness of STORM 3G Elite continues with control/sync. STORM 3G Elite has two RS-422 interfaces, one for controlling a VTR as master, another for control of a slave. Linear timecode I/O, reference in/through/out interfaces (which accept both bi-sync and tri-sync level), and a locking power connector round out the rest of the interfaces.

KEY FEATURES

- HD/SD-SDI input and output with embedded audio and timecode
- HDMI input and output for full-resolution, real-time monitoring from the included EDIUS NLE software
- Embedded HDMI audio input and output for high-quality audio monitoring
- Video and audio output stays perfectly in sync, with editing windows for accurate editing and trimming
- Reference input supports bi-level or tri-level sync
- RS-422 master and slave machine-control support
- Edit any mix of SD and HD resolution video content together in real time
- Works with many different native video formats, including DV, HDV, AVCHD, uncompressed, and more
- Real-time SD/HD resolution, aspect-ratio and frame-rate conversion and output, including 16:9-to-4:3 and NTSC-to-PAL
- Supports newer file-based formats, including Infinity™ JPEG 2000, XDCAM and XDCAM EX, P2 (DVCPRO and AVC-Intra), and GFCam
- Compatible with Windows XP (32-bit), Windows Vista (32/64-bit) and Windows 7 (32/64-bit) operating systems

SPECIFICATIONS

Bus Interface

PCI Express Rev. 1.1 x4 lane
ExpressCard/34

Video Formats (Input/Output) (3G-SDI)

- 1920x1080p50/59.94
- 1920x1080i50/59.94
- 1920x1080psF23.98/24/25/29.97
- 1280x720p50/59.94
- 720x486i59.94
- 720x576i50

Video Formats (Input/Output) (HDMI)

- 1920x1080p50/59.94
- 1920x1080i50/59.94
- 1280x720p50/59.94
- 720x480i59.94
- 720x576i50
- 720x480p59.94
- 720x576p50

Video Output Connector

3G-SDI:

- Video: SMPTE-292M, SMPTE-259M-C
- Audio: SMPTE-299M, SMPTE-272M-A
- Analog Component (BNC: Y/Pb/Pr)
- Analog Composite (BNC)
- Timecode: LTC/VITC Packet (HD), D-VITC (SD)

HDMI 1 port (HDCP not supported):

- Video: YCbCr4:2:2 or RGB4:4:4 (8/10-bit)
- Audio: LPCM 8-channel (24-bit/48 kHz)

Video Input Connector

3G-SDI:

- Video: SMPTE-292M, SMPTE-259M-C
- Audio: SMPTE-299M, SMPTE-272M-A

Analog Component (BNC: Y/Pb/Pr)

Analog Composite (BNC)

Timecode: VITC Packet (HD), D-VITC (SD)

HDMI 1 port (HDCP not supported):

- Video: YCbCr4:2:2 or RGB4:4:4 (8/10-bit)
- Audio: LPCM 8-channel (24-bit/48 kHz)

Audio Formats

LPCM 48 kHz/24-bit

Audio Output Connectors

- HDMI LPCM 8-channel
- HD/SD-SDI embedded audio 8-channel
- AES/EBU digital audio 8-channel
- Balanced analog audio 4-channel
- Balanced analog audio monitor 2-channel
- Unbalanced analog audio monitor 2-channel

Audio Input Connectors

- HDMI LPCM 8-channel
- 3G-SDI embedded audio 8-channel
- AES/EBU digital audio 8-channel
- Balanced analog audio 4-channel

Reference Input

BNC: Black Burst or Tri-Level Sync

Machine Control

9-pin D-Sub: RS-422A x 2 (Master/Slave)

Power Requirements

+12V: 1.6A, +3.3V: 0.5A

Physical Dimensions

2 RU

Regulatory Compliance

CE, FCC CLASS B, C-Tick

Minimum System Requirements

- Any Intel Core 2 or Core iX CPU. Intel or AMD single core CPU with a 3 GHz processor speed or faster (multiple CPUs and/or multi-core CPUs are recommended). SSE2 and SSE3 instruction set supported
- 1 GB RAM (2 GB or more recommended)
- One free PCI Express x1 bus slot
- 800 MB or more space required for software installation
- Drive with ATA100/7,200 rpm or faster capable of sustaining at least 20 MB/s data transfer:
 - Available hard disk space should be twice the size of the file to be edited
 - A RAID stripe set of two or more hard disk drives is required for multiple HD stream output

- A graphics card with at least 256 MB of graphics memory (512 MB recommended) with support for Direct3D 9.0c or later, and PixelShader Model 3.0 or later is required (PixelShader Model 4.0 or later recommended)
- Sound card with WDM driver support required
- DVD-ROM drive is required for software installation. For writing onto DVD or Blu-ray disc, a compatible drive is required
- Free USB port (1.1 or higher) is required for security key
- Windows XP (SP3 or later, 32-bit)
- Windows Vista (SP1 or later, 32-bit or 64-bit)
- Windows 7 (32-bit or 64-bit)

PACKAGE CONTENTS

- STORM 3G Elite breakout box
- PCI Express 4X IF bus card with connection cable
- Express 34 bus card with connection cable
- EDIUS 6 software installation disc set (DVD-ROM)
- EDIUS 6 bonus disk (DVD-ROM)
- EDIUS 6 USB dongle
- EDIUS 6 QuickStart guide
- Hardware setup manual



DEALERS/RESELLERS

To find your local reseller or dealer for Grass Valley professional audio video products, please visit professional.grassvalley.com/sales/.

SERVICE & SUPPORT

Twelve-month limited warranty with service provided through local resellers. Additional support available on a contractual basis.