

# STORM 3G

3G-SDI EDITING WITH HDMI  
MONITORING OUTPUT

3G HD/SD SDI-based, multi-format  
editing with HDMI monitoring.



STORM 3G™ is designed for video professionals who want one solution for both SDI-based editing and tapeless workflows, with the capability to preview their projects on affordable HDMI monitors.

Based on the PCI Express form factor, the STORM 3G solution includes EDIUS® nonlinear editing software, 3G HD-SDI inputs and outputs, and an HDMI output for full-resolution, real-time preview monitoring. Embedded HDMI audio provides high-quality audio monitoring. It's a premium, high-powered solution for multi-format editing.

Timecode input and output is supported via the RS-422 port for accurate editing from field logs. The reference input supports both analog blackburst and tri-level sync. External VTR ingest can be controlled via the RS-422 port and the optional VTR emulation software may be used to control the EDIUS software like a VTR for direct playout from the workstation.

The STORM 3G board can handle any mix of high- and standard-definition (HD and SD) video content; unlimited video, audio, title, and graphics layers; and any combination of real-time effects. It also

offers real-time, full-resolution, full-quality HD and SD video outputs.

An optional timecode in/reference out board takes a linear timecode source via the BNC connector and provides two reference outputs-blackburst or tri-level sync-providing a means to synchronize both the STORM 3G and an external device, such as a source deck, from a single timecode source.

## KEY FEATURES

- 3G-SDI input and output with embedded audio and timecode
- HDMI output for full-resolution, real-time monitoring from the included EDIUS NLE software
- Embedded HDMI audio 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 or 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 AVCHD, AVC-Intra, MPEG-2, uncompressed, and more
- Supports newer file-based formats, including Infinity™ JPEG 2000, XDCAM HD and XDCAM EX, P2 (DVCPRO and AVC-Intra), and GFCam
- Compatible with Windows 7 (32/64-bit) and Windows Vista (32/64-bit) and Windows XP (32-bit) operating systems

\* Slave functions require the EDIUS VTR Emulation option, available separately

**SPECIFICATIONS**

**Bus Interface**

PCI Express Rev. 1.1 x4 lane

**Video Formats (Output) (mini HDMI)**

- 1929x1080p23.98/25/29.97/50/59.94
- 1920x1080i50/59.94
- 1280x720p59.94
- 720x480i59.94
- 720x576i50
- 720x480p59.94
- 720x576p50

**Video Formats (Input/Output) (HD/SD-SDI)**

- 1920x1080i50/59.94
- 1920x1080psF23.98/24/25/29.97/50/60
- 280x720p59.94
- 720x486i59.94
- 720x576i50

**Video Output Connector**

- HD/SD-SDI:
  - Video: SMPTE-292M, SMPTE-259M-C
  - Audio: SMPTE-299M, SMPTE-272M-A
  - Timecode: LTC/VITC Packet (HD), D-VITC (SD)
- Mini HDMI 1 port (HDCP not supported):
  - Video: YCbCr4:2:2 or RGB4:4:4 (8-bit)
  - Audio: LPCM 8-channel (24-bit/48 kHz)

**Video Input Connector**

- HD/SD-SDI:
- Video: SMPTE-292M, SMPTE-259M-C
  - Audio: SMPTE-299M, SMPTE-272M-A
  - Timecode: VITC Packet (HD), D-VITC (SD)

**Audio Formats**

LPCM 48 kHz/24-bit

**Audio Output Connectors**

- Mini HDMI LPCM 8-channel
- HD/SD-SDI embedded audio

**Reference Input**

BNC: Black Burst or Tri-Level Sync

**Machine Control**

9-pin D-Sub: RS-422A (Master/Slave\*)

**Power Requirements**

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

**Physical Dimensions**

111.15 x 167.65 mm (4.375 x 6.600 in.) (HxW)

**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)

\* Slave functions require the EDIUS VTR Emulation option, available separately

**PACKAGE CONTENTS**

- STORM 3G PCI Express x4 bus card
- EDIUS 6 software installation disc set (DVD-ROM)
- EDIUS USB dongle
- Hardware setup manual
- Optional timecode in/reference out board (pictured)



**DEALERS/RESELLERS**

To find your local reseller or dealer for Grass Valley professional audio video products, please visit [professional.grassvalley.com/sales/](http://professional.grassvalley.com/sales/).

**SERVICE & SUPPORT**

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