

# STORM 3G

3G-SDI EDITING WITH HDMI MONITORING OUTPUT

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



Grass Valley® 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® Pro 6.5 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 Pro 6.5 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 Pro 6.5 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-bit and 64-bit) and Windows 8 (64-bit) with the EDIUS 6.52 update

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

## SPECIFICATIONS

### Bus Interface

PCI Express Rev. 1.1 x4 lane

### 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 (Output) (mini 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
- Timecode : LTC/VITC Packet (HD), D-VITC (SD)

#### Mini HDMI 1 port (HDCP not supported):

- Video: YCbCr 4:2:2 (8-bit and 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
- Timecode: VITC Packet (HD), D-VITC (SD)

### Audio Formats

LPCM 48 kHz/24-bit

### Audio Output Connectors

- Mini HDMI LPCM 8-channel
- 3G-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
- Windows 8 (64-bit) with the EDIUS 6.52 update
- Windows 7 (32-bit or 64-bit)
- Internet connection for EDIUS software activation

**Note:** EDIUS Pro 6.5 requires Windows 7 (32-bit or 64-bit). Windows 8 (64-bit) can be used with the EDIUS 6.52 update. EDIUS Pro 6.5 software requires that all previous versions of EDIUS software be uninstalled.

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

## PACKAGE CONTENTS

- STORM 3G PCI Express x4 bus card
- EDIUS Pro 6.5 software installation disc set (DVD-ROM)
- Hardware setup manual

The optional timecode in/reference out board is pictured



## MAXIMIZE AND OPTIMIZE YOUR INVESTMENT



With program production and distribution becoming ever more complex and affecting business issues on a daily basis, you need a trusted partner that understands those complexities and how to convert them into opportunities. Grass Valley's team of experienced engineers and system integrators can help you turn your challenges into opportunities in the most efficient and cost-effective way possible, from system design all the way through to commissioning. Grass Valley Professional Services helps you to:

**Define:** We consult with you to help define your business and technology requirements and then design the right solutions to meet them.

**Deploy:** Our professional service organization, backed by proven project management methodologies, can take you from design through deployment, commissioning, and training.

**Support:** We offer a complete portfolio of support services to keep your systems running, and help manage your long-term maintenance needs.

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