

# STORM 3G

3G-SDI I/O with HDMI Monitoring Output for EDIUS



A single solution for both SDI-based editing and tapeless workflows, with the capability to preview EDIUS projects on affordable HDMI monitors.

STORM 3G, from Grass Valley, a Belden Brand, 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 has 3G-SDI inputs and outputs, and an HDMI output for full-resolution, real-time preview monitoring. Embedded 3G-SDI audio provides high-quality audio monitoring. It's a premium, high-powered solution for multi-format editing with the EDIUS NLE (purchased separately).

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 7.x software like a VTR for direct payout from the workstation.

The STORM 3G board can handle any mix of high- and standard-definition (1080p, 1080i, 720p, NTSC and PAL) 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.

# STORM 3G 3G-SDI I/O with HDMI Monitoring Output for EDIUS

## KEY FEATURES

- 3G-SDI input and output with embedded 16ch audio and timecode
  - HDMI output for full-resolution, real-time monitoring from EDIUS Pro NLE software (purchased separately)
  - Embedded HDMI 8ch 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 blackburst or tri-level sync
  - RS-422 master or slave machine-control support\*
- \* 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-424M (Level-B), 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-424M (Level-B), 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 16-channel 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 for EDIUS NLE

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). SSE3 (Supplementary) instruction set supported

1 GB RAM (4 GB or more recommended)

One free PCI Express x4 bus slot

6 GB or more space required for software installation

Drive with ATA100/7,200 rpm or faster is required for video storage:

- Available hard disk space should be twice the size of the file to be edited
- RAID-0 is recommended for HD and above resolution editing

A graphics card supporting a screen resolution of at least 1024x768, 32-bit, Direct3D 9.0c or later and PixelShader Model 3.0 or later is required

Graphics card memory requirements when using GPUfx will vary depending on the project format. For 10-bit SD project: 1 GB or more recommended, for HD/4K projects 2 GB or more 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 7/8/8.1 (64-bit)

Internet connection for EDIUS software activation

*Note: EDIUS requires Windows 7/8/8.1 (64-bit).*

*Note: For Windows 8/8.1 EDIUS v7.21b1530 or later is required.*

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

## ORDERING

### Package Contents

STORM 3G PCI Express x4 bus card. Model No. 600889.

An optional timecode in/reference out board also is available (pictured bottom right). Model No. 600612.



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