

# VisionLC-HD2

Dual channel  
"LiveStream:Capture" card



## HIGH PERFORMANCE CARD

Discreet video capture is now the mainstay of many small form factor appliances being used in markets such as lecture capture, distance learning and medical environments. Datapath's VisionLC-HD2 provides dual channel, high definition HDMI capture for use within such applications.

Datapath's LiveStream:Capture architecture allows captured video to be processed and delivered in real time to a processor or graphics card. The VisionLC-HD2 supports on board colour space conversion and scaling, providing the ability to efficiently transfer the video signal in a suitable format for rendering or encoding applications. The VisionLC-HD2 natively supports 32, 24, 16 and 12 bit YUV and RGB formats.

## FEATURES

- Capture channel 1
  - HDMI capture channel
  - 297 Mpixel/s maximum TMDS clock frequency
  - 4096 x 2160p at 30Hz 4:4:4
- Capture channel 2
  - HDMI capture channel
  - 165 MHz maximum TMDS clock frequency
  - 1920 x 1080p at 60Hz 4:4:4
- 1.6 GB/s total DMA bandwidth
- High performance up and down scaling
- Colour space conversion to supported output formats
- PCI Express Gen 2 x4 low profile
- Datapath unified Windows® and Linux® driver support

Engineering the **world's best** visual solutions

**DATAPATH**  
EXCELLENCE BY DESIGN

# Professional digital audio and video capture card

## MULTI-APPLICATION CAPTURE

The VisionLC-HD2 capture card has been designed for use within application models such as:

- Medical environments
- Simulation systems
- Live events
- PC and gaming console capture
- Lecture and presentation capture
- Real time streaming

It is also possible to put more than a single card into a system for multiple capture channels.

Due to the nature of the LiveStream:Capture architecture, the VisionLC-HD2 is not supported for wall controller applications that depend on Datapath's MultiStream technology.

## VIDEO STREAMING

Built upon the Microsoft AV Stream framework, VisionLC-HD2 inputs can be accessed and enumerated by any DirectShow or Media Foundation supported application. A Video for Linux (V4L) driver package is also available for download.

Tested applications include:

- Microsoft Media Encoder
- VLC
- Telestream WireCast
- vMix
- Opencast Matterhorn
- Vidblaster
- OBS Project
- Adobe Flash Media Encoder
- Dataton Watchout

## COMPATIBILITY

The VisionLC-HD2 is supported by the following operating systems: Linux, Windows® XP, Windows Vista, Windows Server 2003, Windows Server 2008, Windows 7, Windows 8/8.1 and Windows 10.

## SPECIFICATION

### BOARD FORMAT

PCIe Gen 2 x4 plug-in card

### DIMENSIONS

103mm x 64mm

### CONNECTORS

2 x HDMI

### PIXEL RATE

Channel 1 - 297Mpixel/s  
Channel 2 - 165Mpixel/s

### MAX CAPTURE RESOLUTION

Channel 1 - 4906 x 2160p at 30Hz  
Channel 2 - 1920 x 1080p at 60Hz

### TRANSFER RATE

1.6 GB/s maximum DMA transfer rate

### HARDWARE COLOUR SPACE CONVERSION

32 / 24 / 16bit RGB (4:4:4) 16bit YUV (4:2:2) 12bit YUV, NV12, YV12 (4:2:0)

### AUDIO SUPPORT

Stereo Line-In / Stereo balanced inputs with programmable gain (+/-12dB) 16bit sampling at 44.1 / 48 / 96kHz  
Analogue stereo line-out for direct passthrough of selected input at up to 64kHz sampling, sourced from. Analogue input or HDMI channel

### LOW LATENCY

LiveStream Capture. Single frame time plus DMA transfer of final line

### POWER REQUIREMENTS

Max current at 1.5A at 3.3V Max power ≈ 5W

### OPERATING TEMP

0 °C to 35 °C / 32 °F to 96 °F

### STORAGE TEMP

-20 °C to 70 °C / -4 °F to 158 °F

### RELATIVE HUMIDITY

5% to 90% non-condensing

### WARRANTY

3 years

## MODELS AVAILABLE

Order Code: VisionLC-HD2

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*All products are shipped with the latest software available, unless stated otherwise. Special requirements may be organised by contacting our Sales team.*

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