



# VGA2USB PRO



Epiphan Systems' VGA2USB Pro is the world's most advanced external frame grabber and is designed for power users that require extremely high precision industrial VGA capture. The VGA2USB Pro can capture VGA streams at resolutions of up to 2048 x 2048 in a 24-bit palette, and is able to achieve a maximum capture rate of 60 frames per second. Encased in solid aluminum, this device uses the most advanced FPGA and Philips ADC in order to achieve pixel rates of 270 Megapixels per second.



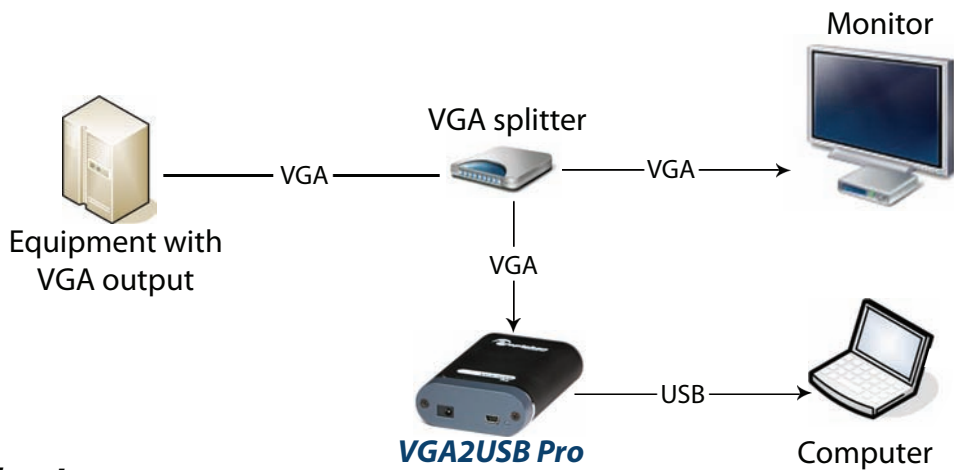
In military, scientific, industrial, and educational applications which require the capture of a VGA signal in ultra-high precision, the VGA2USB Pro is the frame grabber of choice.

Packing 32 Megabytes of buffer RAM, on board cropping, integrated color space conversion, USB Transfer Accelerator™, and Compression Booster Filters™, this is Epiphan Systems' most powerful VGA grabber. While being the same physical size as the other devices in the VGA2USB family, the VGA2USB Pro provides the user with a sharp and diagnostic-quality picture at any given resolution.

An SDK, WDM drivers, and DirectShow API is included for those users that need to integrate the VGA2USB Pro into their custom applications.



## VGA2USB Pro Connection Diagram



### Features:

- 2048 x 2048 maximum capture resolution.
- Capture rates of up to 60fps.
- 32MB on board RAM buffer.
- 100% lossless on board compression.
- View, record, archive, broadcast, or print directly from a VGA stream.
- Compatible with 3<sup>rd</sup> party software via WDM drivers.
- External power source required. Universal adaptor included.
- Full hardware solution – no software required on source machine.
- Rugged aluminum casing.

### Technical Specifications:

<b>Interface</b>	Supports USB 2.0 and USB 1.1 buses. Performance of the VGA2USB PRO device will be significantly downgraded, however, when connected to a USB 1.1 bus.	
<b>Dimensions</b>	3.54" x 2.36" x 0.91" 90 x 60 x 23 mm	
<b>Connectors</b>	One VGA D type connector One USB mini B type connector One 5V DC 1.3mm power supply connector	
<b>VGA Signaling</b>	Supports the following signaling:  R,G,B plus separate HSYNC and VSYNC signals; R,G,B plus CSYNC signal; R,G,B with Sync-On-Green synchronization.	
<b>VGA Modes</b>	HSYNC rate is between 15KHz and 150KHz Pixel rate is between 12MPixel/s and 270 MPixel/s for noninterlaced grab Pixel rate is between 270 MPixel/s and 532MPixel/s for two consequent frame interlaced grab.	
<b>Color Resolution</b>	RGB24 (8:8:8) RGB16 (5:6:5) RGB8 (2:3:3) YUY2 UYUV	
<b>Supported Video Modes</b>	720x400 at 70, 85Hz 640x480 at 60, 70, 72, 75, 85Hz 800x600 at 56, 60, 70, 72, 75, 85Hz 1024x768 at 60, 70, 72, 75, 85Hz 1152x864 at 60, 70, 75, 85Hz 1152x900 at 66, 76Hz 1280x960 at 60, 85Hz 1280x1024 at 60, 70, 75, 85Hz 1600x1200 at 60, 65, 70, 75, 85Hz 1920x1200 at 60, 70, 72, 75, 85Hz 2048x1536 at 60, 70, 72, 75, 85Hz 2048x2048 <sup>1</sup> at 60, 70, 72, 75, 85Hz 1024x768 38Hz Interlaced	
<b>Update Rate</b>	Frame rate varies depending on content	
	<b>Resolution</b>	<b>Frame Rate</b>
	640 x 480	30.0 - 60 fps
	800 x 600	22.6 - 60 fps
	1024 x 768	15.0 - 60 fps
	1280 x 1024	10.0 - 51 fps
	1600 x 1200	8.0 - 33 fps
	1920 x 1200	5.7 - 31 fps
	2048 x 1536	5.6 - 22 fps
	2048 x 2048	5.0 - 18 fps
<b>Video Format Options</b>	RGB plus HSync and VSync (5 wire)	

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