vDisplay HDI-Pro External Frame Grabbers

Compact, low-power replacements for PCs at display monitors.

Overview

Pleora's vDisplay™ HDI-Pro External Frame Grabbers allow system manufacturers and integrators to increase system reliability and lower power consumption by eliminating PCs at display monitors. These external frame grabbers are compact, solid-state replacements for PCs where size, weight, power, or reliability are critical considerations.

The vDisplay HDI-Pro consumes approximately 3.2 Watts (W), which dramatically reduces electricity costs in 24/7 applications. A start-up time of only a few seconds provides an additional advantage over using a PC with a standard operating system.

vDisplay HDI-Pro External Frame Grabbers interact seamlessly with Pleora's other products in networked digital video systems. The frame grabbers are also compatible with the GigE Vision® and GenICam™ standards, enabling them to interoperate with third-party equipment in multi-vendor systems. The HDI-Pro receives video data from GigE Vision® compliant cameras and outputs it in real time with low, consistent latency over an HDMI/DVI interface.

The HDI-Pro can be pre-configured to receive video from any of 32 cameras via unicast or multicast transmission, and can autonomously control up to eight cameras. It is bundled with Pleora's feature-rich application toolkit, eBUS™ SDK.

Features

- Solid-state device for display of video from GigE Vision-compliant cameras over an HDMI or DVI interface, with low, consistent latency

- Auto-senses monitor resolution and refresh rate capabilities

- Autonomously controls GigE Vision-compliant cameras without the requirement for a software control application

Ordering Information

930-1001	• vDisplay HDI-Pro External Frame Grabber **in enclosure**
930-1000	• vDisplay HDI-Pro External Frame Grabber **OEM board set** in carrier bracket
930-1002	• vDisplay HDI-Pro Development Kit; includes 930-1001, mounting bracket with screws, power supply, and eBUS SDK USB stick

Pleora Technologies

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Key functionality	• Highly reliable, 1 Gb/s data reception rate with low latency • Converts IP packets to HDMI/DVI-compatible video signals • Available as enclosed unit or OEM board set
Camera type support	• Area scan and linescan • Other camera types (Camera Link® , Analog, LVDS, etc) can be used in combination with a GigE Vision® compliant IP engine • Supports Bayer, RGB, YUV, and monochrome pixel formats • GenICam™ compliant
Monitor support	• Interoperates with VESA compliant single link monitors • Auto-senses monitor display capabilities • Can interoperate with custom displays by manually configuring display timing parameters

Connectors

Power	• 12-pin Hirose (HR10A-10R-12PB)
Network	• RJ-45
Video output	• HDMI/DVI

Device Control

| Setup and advanced configuration	• Via eBUS™ SDK or any GenICam compliant application • Settings can be stored in persistent memory • Plug-and-play autonomous control of GigE Vision compliant camera

Networking Features

GigE-based	• 10/100/1000 Mb/s • IEEE 802.3 (Ethernet), IPv4, IGMPv2, UDP, ICMP (ping), DHCP, and jumbo packets • Long reach: 100 m point-to-point, further with Ethernet switches or fiber
GigE Vision Protocol	• GigE Vision Streaming Protocol (GVSP) • GigE Vision Control Protocol (GVCP)

Characteristics

Size (L x W x H)	• **Enclosed:** 98 mm X 59 mm X 40 mm • **OEM:** 93 mm X 51 mm X 26 mm
Weight	• **Enclosed:** 184 g • **OEM:** 44 g
Operating temperature	• **Enclosed:** 0°C to 55°C • **OEM:** 0°C to 70°C*
Storage temperature	• -40°C to 85°C
Power supply	• 5 V to 16 V
Power consumption	• 3 W to 4.3 W (temperature and input voltage dependent)
MTBF@40°C	• 730 211 hours

*The product is specified for operation within the stated ambient and case temperature range of its components.
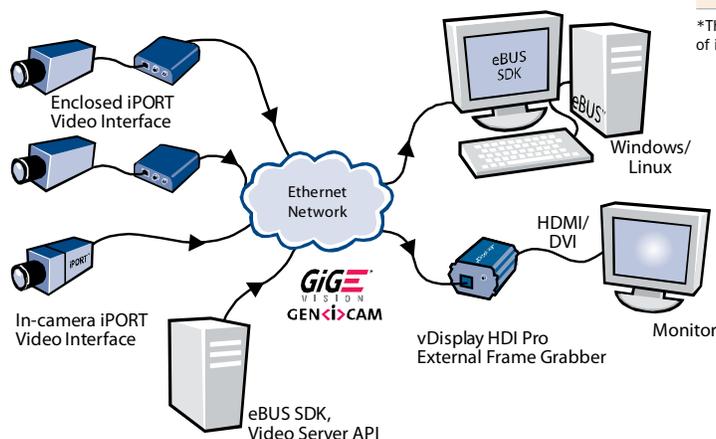
Pleora's networked video connectivity solutions leverage the networking flexibility of the switched Ethernet architecture