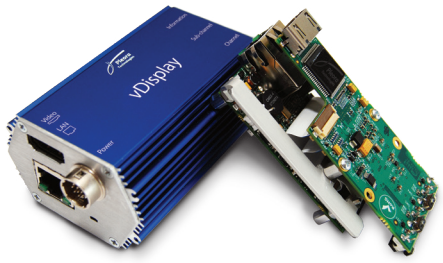
# vDisplay HDI-Pro External Frame Grabbers

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

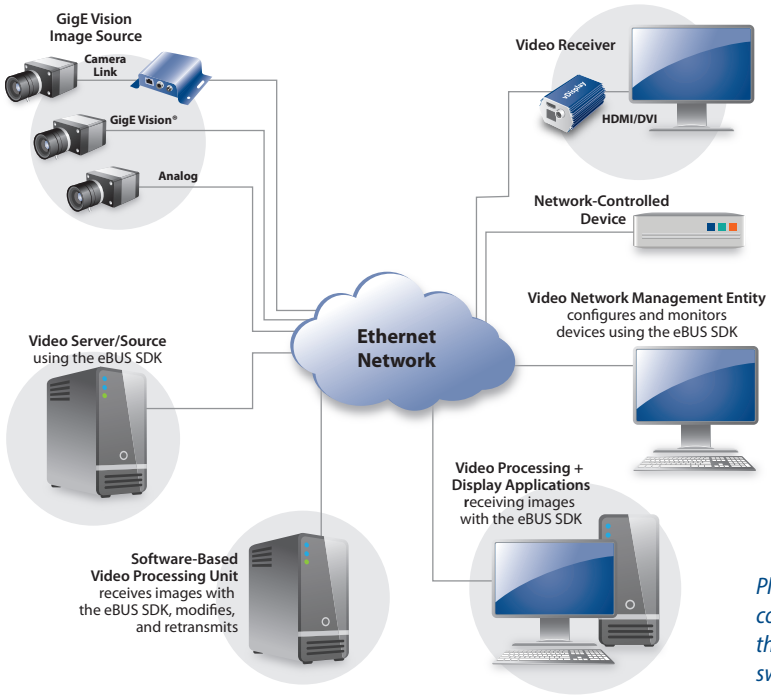



## Overview

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 thirdparty 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.




*Pleora's networked video connectivity solutions leverage the networking flexibility of the switched Ethernet architecture*

## Features

- Solid-state device for display of video from GigE Visioncompliant cameras over an HDMI or DVI interface, with low, consistent latency
- Supports resolutions up to 1080p
- Auto-senses monitor resolution and refresh rate capabilities
- Autonomously controls GigE Vision-compliant cameras without the requirement for a software control application

GENICAM GIGE VISION

Pleora Technologies

# vDisplay HDI-Pro External Frame Grabbers

## vDisplay IP Engines

| | |
|---|---|
| **Key functionality** | • Highly reliable, 1 Gb/s data reception rate with low latency<br>• Converts IP packets to HDMI/DVI-compatiblevideo signals<br>• Available as enclosed unit or OEM board set |
| **Camera type support** | • Area scan and linescan<br>• Other camera types (Camera Link®, Analog, LVDS, etc) can be used in combination with a GigE Vision® compliant IP engine<br>• Supports Bayer, RGB, YUV, and monochrome pixel formats<br>• GenICam™ compliant |
| **Monitor support** | • DVI: supports resolution up to HDTV/60<br>• HDMI: supports resolution up to 1080p<br>• Interoperates with VESA compliant single link monitors<br>• Auto-senses monitor display capabilities<br>• 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 any GenICam compliant application<br>• Settings can be stored in persistent memory<br>• Plug-and-play autonomous control of GigE<br>• Vision compliant camera |

## Networking Features

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

## Characteristics

| | |
|---|---|
| **Size (L x W x H)** | • Enclosed: 98 mm X 59 mm X 40 mm<br>• OEM: 93 mm X 51 mm X 26 mm |
| **Weight** | • Enclosed: 184 g<br>• OEM: 44 g |
| **Operating temperature** | • Enclosed: 0°C to 55°C<br>• 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 |

## Ordering Information

| | |
|---|---|
| **930-1001** | **vDisplay HDI-Pro External Frame Grabber** in enclosure |
| **930-1002** | **vDisplay HDI-Pro Development Kit**; includes 930-1001, mounting bracket with screws, power supply, and eBUS SDK USB stick |
| **930-1006** | **vDisplay HDI-Pro Developer Bundle**; includes vDisplay HDI-Pro Enclosed (930-1001), bracket with mounting screws, power supply, eBUS SDK USB stick, and one year of eBUS SDK Developer Annual Maintenance and Support. |

* The product is specified for operation within the stated ambient and case temperature range of its components.

**Pleora Technologies Inc.**
Email: info@pleora.com
pleora.com