

iPORT Analog-Pro External Frame Grabbers

Preserve investments in existing cameras and optics, while converting to fully digital video connectivity

Overview

Pleora's iPORTTM Analog-Pro External Frame Grabbers allow system manufacturers and integrators to treat analog cameras as native GigE Vision® cameras. With these external frame grabbers, analog cameras enjoy the long-distance reach of Gigabit Ethernet (GigE) for both video and remote control, and can be mixed with native GigE Vision cameras in networked environments.

System manufacturers can shorten time-to-market, reduce development and deployment risk, and lower design and system costs by reusing expensive or application-specific analog cameras in GigE Vision installations, with minimal software development.

iPORT Analog-Pro External Frame Grabbers interact seamlessly with Pleora's other products in networked or point-to-point digital video systems. The frame grabbers also comply fully with the GigE Vision and $\text{GenlCam}^{\text{TM}}$ standards, enabling interoperation with third-party equipment in multi-vendor environments.

Compact and simple to integrate, Analog-Pro external frame grabbers can transmit two channels of composite (NTSC, PAL, CCIR, or RS-170) video simultaneously at up to 30 frames per second (fps) each with low, predictable latency over a GigE link. GigE supports cabling distances of up to 100 meters using standard CAT5e/6 wiring. With off-the-shelf Ethernet switches, distances can be unlimited.



At the PC, Analog-Pro External Frame Grabbers connect via GigE, eliminating the need for a desktop computer with an available peripheral card slot. As a result, system designers can reduce system size, cost, and power consumption by using computing platforms with smaller form factors, such as laptops, embedded PCs, and single board computers.

The Analog-Pro is bundled with Pleora's feature-rich application toolkit, eBUS™ SDK, and compatible with Pleora's vDisplay™ External Frame Grabbers, which deliver video directly to a monitor.

Features

- Transmits two independent channels of analog composite video over Gigabit Ethernet with low, consistent latency.
- · Built-in de-interlacing algorithms.
- · Supports square pixels (Q4 2013).
- · RS-232 and GPIO to control external accessories.
- · Available as enclosed units and OEM board sets.

Ordering Information

900-6207	iPORT Analog Pro External Frame Grabber board set with unsoldered GPIO/serial connector
900-6209	iPORT Analog Pro External Frame Grabber enclosed product
900-6208	iPORT Analog Pro External Frame Grabber Development Kit, which contains 900-6209, a power supply, and a GigE NIC



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Networked Video Connectivity Solutions

iPORT™ External Frame Grabbers	Highly reliable; up to 1 Gb/s data transfer rate with low, end-to-end latency OEM board set or enclosed unit 32MB image buffer 4 TTL inputs, 3 TTL outputs (4th TTL output available with customer-supplied connector); software-controllable 2 RS-232 serial ports
eBUS™ SDK	 eBUS Universal Pro driver Sample applications, including NetCommand™ sample application, a demonstration of multi-device network connectivity Driver installation tool Documentation
GigE Vision® and GenlCam™	Fully-compatible firmware loadGuarantees delivery of all packetsComprehensive data transfer diagnostics

Video Formats

Video standards	· NTSC, PAL, CCIR, RS-170
Pixel formats	· 8-bit monochrome, YUV4:2:2 (packed)
Deinterlacing Support	Off Weave Line duplication

Connectors

Power	• Enclosed: Hirose 6-pin • OEM: 2-pin, 0.10" header
Network	· RJ-45 female
Video interface	· 2 x BNC female
Serial and GPIO	• 12-pin round, locking connector

Networking Features

Gigabit Ethernet-based	 Low-cost, easy-to-use equipment Compatible with 10/100/1000 Mb/s Ethernet networks Supports IEEE 802.3 (Ethernet), IP, IGMP v.2, UDP and ICMP (ping) Long reach: 100 m point-to-point, unlimited distance with Ethernet switches
Multicast capability	Enables advanced distributed processing and control architectures

Characteristics

Size (L x W x H)	• Enclosed: 113mm x 82mm x 51mm • OEM: 105 mm X 52 mm X 42 mm
Operating temperature	• 0°C to 40°C (OEM higher with thermal pad)
Storage temperature	· -40°C to 85°C
Power Supply	• 5 V to 16 V
Power Consumption	Maximum 4W (with both channels in use)

