

iPORT Analog-Pro External Frame Grabbers

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



Overview

Pleora's iPORT™ Analog-Pro External Frame Grabbers allow designers 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.

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) at up to 1 Gbps each with low, predictable latency over a GigE link. GigE supports cabling distances of up to 100 meters using standard CAT5e/6 cabling. With off-the-shelf Ethernet switches, distances can be unlimited.

The connection at the computing platform is a standard GigE port, allowing designers to reduce system size, cost, and power consumption by using smaller form factor computing platforms, such as laptops, embedded PCs, and single-board computers.

The Analog-Pro is supported by Pleora's feature-rich eBUS™ SDK application tool kit, which allows designers to develop and modify production-ready software applications while avoiding supporting multiple APIs from different vendors.

Features

- Preserve investments in existing analog cameras and optics, while converting to fully digital video connectivity to leverage cabling and networking advantages
- Highly reliable 1 Gbps data transfer rate of two independent channels of analog composite video over Gigabit Ethernet with low, consistent latency
- Built-in de-interlacing algorithms
- Supports square pixels
- RS-232 and GPIO to control external accessories
- Available as enclosed units and OEM board sets

iPORT Analog Pro External Frame Grabbers

Networked Video Connectivity Solutions

iPORT™ External Frame Grabbers	<ul style="list-style-type: none">Highly reliable; up to 1 Gb/s data transfer rate with low, end-to-end latencyOEM board set or enclosed unit32MB image buffer4 TTL inputs, 3 TTL outputs (4th TTL output available with customer-supplied connector); software-controllable2 RS-232 serial ports
eBUS SDK	<ul style="list-style-type: none">eBUS SDK: Single API to receive video over GigE, 10 GigE, and USB that is portable across Windows, Mac, and LinuxeBUS Tx: Software implementation of a full device level GigE Vision transmittereBUS Rx: High-speed reception of images or data for hand-off to the end applicationeBUS Player Toolkit: View streams and develop, test and evaluate advanced features
GigE Vision® and GenICam™	<ul style="list-style-type: none">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	<ul style="list-style-type: none">OffWeaveLine duplication

Features

Gigabit Ethernet-based	<ul style="list-style-type: none">Low-cost, easy-to-use equipmentCompatible with 10/100/1000 Mb/s Ethernet networksSupports 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

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 circular

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 VDC to 13 VDC
Power Consumption	Maximum 4W (with both channels in use)
MTBF at 40°C	915,936 hours
ECCN	EAR99

Ordering Information

900-6207	iPORT Analog-Pro OEM Kit. Analog-Pro OEM board set assembled on a carrier bracket*, GPIO board assembly with flat-flex cable, and unsoldered 12-pin circular connector.
900-6209	iPORT Analog-Pro Enclosed. Analog-Pro in mountable enclosure.
900-6208	iPORT Analog-Pro Development Kit. Includes 900-6209, power supply, Gigabit Ethernet desktop NIC, Ethernet cable, and eBUS SDK USB stick.
900-6215	iPORT Analog-Pro SD Developer Bundle. Includes iPORT Analog-Pro SD Enclosed External Frame Grabber (900-6209), power supply, Gigabit Ethernet desktop NIC, Ethernet cable, eBUS SDK USB stick, and one year of eBUS SDK Developer Annual Maintenance and Support.

* Contains assembly # 900-6206 which is not an orderable part number.

