Lambert HS540

Simple and Efficient High-Speed Imaging

The Lambert HS540M and the Lambert HS540S offer simple and efficient high-speed imaging for scientific research, R&D, machine vision and other industrial applications. The Lambert HS540 Series cameras meet the GenICam standard, so they are easy to integrate into your existing set-up.

Fast High-Resolution Sensor
Both the Lambert HS540M and the HS540S feature a high-speed CMOS sensor that records full-resolution images (1696 x 1710 pixels) at 540 fps. To increase the framerate, the camera can use a smaller part of the sensor to reduce the image resolution. By doing so, it can deliver framerates of up to 166000 frames per second. Its electronic global shutter and minimum exposure time of 2 us ensure sharp images of fast-moving objects.

Lambert HS540M
The Lambert HS540M is a high-speed camera for research applications. It has up to 16 GB of internal storage and is ideal for scientific research and industrial R&D. After recording your data, you can review the results in our software and trim the high-speed video before exporting it to your computer.

Lambert HS540S
The Lambert HS540S is a streaming high-speed camera for industrial applications. It is designed for high-performance tasks like machine vision, quality control and wafer inspection. Instead of saving the images to internal storage, the camera streams high-speed video directly to your computer over a CoaXPress (CXP) interface. And with Power over CXP (PoCXP) the camera can be powered over the CoaXPress channels, removing the need for a dedicated power cable.

Streaming over CoaXPress
The Lambert HS540S uses the standard CoaXPress interface to stream the image data directly to your computer. The CXP-5 interface support channel speeds of up to 5.00 Gbit/s.

Low Power Consumption
The compact Lambert HS540 is powered over CoaXPress and consumes only 12 W. It can withstand operating temperatures from 0°C up to +40°C.

Applications
Research and Science
Semiconductor Inspection
Robot Vision
Chip Manufacturing
3D Laser Triangulation

Key Features
High-Speed Imaging
CoaXPress Streaming Interface
CE, RoHS and GenICam

Specifications are subject to change without prior notice.

Specifications

Camera Resolution	1696 x 1710 pixels, 8 bit color or monochrome
Framerate	540 fps (full resolution), 5000 fps (480 x 480 px)
Image sensor	Global shutter CMOS
Pixel Size	8 um square
A/D Converter	8 bit
Dynamic Range	49 dB (EMVA1288)
Signal-to-Noise Ratio	42 dB (EMVA1288)
Trigger Modes	Internal free-run, external, CXP
External Trigger	TTL signal, 3.3–5 V, 10 mA, optically isolated
Software Trigger	Programmable exposure (timed or width)
Lens Mount	F-mount, C-mount, M42-mount, custom
Power	Power over CoaXPress, 24 VDC/12 W
CXP Connector	BNC
CXP Channel Speed	5.00 Gbit/s, CXP-5
Environmental	0°C to +40°C
Humidity	< 80% relative, non-condensed