IMAGO TECHNOLOGIES

PRODUCT SPECIFICATION

Vision Sensor PV3

ULTRA COMPACT IMAGE PROCESSING COMPUTER

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VisionSensor PV3

The VisionSensor PV3 is an extremely small, **programmable** camera, that can also be used as GigE vision camera with or without preprocessing. The Quad-Core ARM **Cortex-A53** runs with a modern Debian based Linux OS. The 2MP sensor is available in color or monochrome. For communication with the machine/process, there are 2 digital inputs, 4 digital outputs and a 1000 Mbit/s Ethernet interface. This allows image acquisition with HW and SW trigger as well as a free running mode.
Programming in C++ or other programming languages will quickly result in an intelligent camera specific to the application. Halcon Embedded as the leading library for machine vision is supported, too.

Key Features

- Ultra compact and powerful
- 4 integrated LED's
- Sensor Trigger
- Digital I/Os: 2 IN / 4 OUT

Sensor Option / CMOS – Global Shutter

Optical Size	1/3"
Resolution	1920 × 1080 pixels
Pixelsize	$(2.8\ \mu m)^2$
Framerate (full res.)	115 fps
Partial Scan	yes
Color	mono / color

Processor

Type	Quad Core ARM Cortex-A53
Processor Clock	4 × 1.8 GHz
DDR RAM	2 GB DDR4
Mass Storage	1 × µSD Card ≥ 32 GB

Interfaces

Ethernet TCP/IP, FTP	1 000 Mbit/s
Digital In/Out	2 × Input / 4 × Output, 24V

Lens Properties

Lens Mount	S-Mount
Focal length	9mm [others on request]
Field of View (H x V)	≈ 34.3° × ≈ 19.7°

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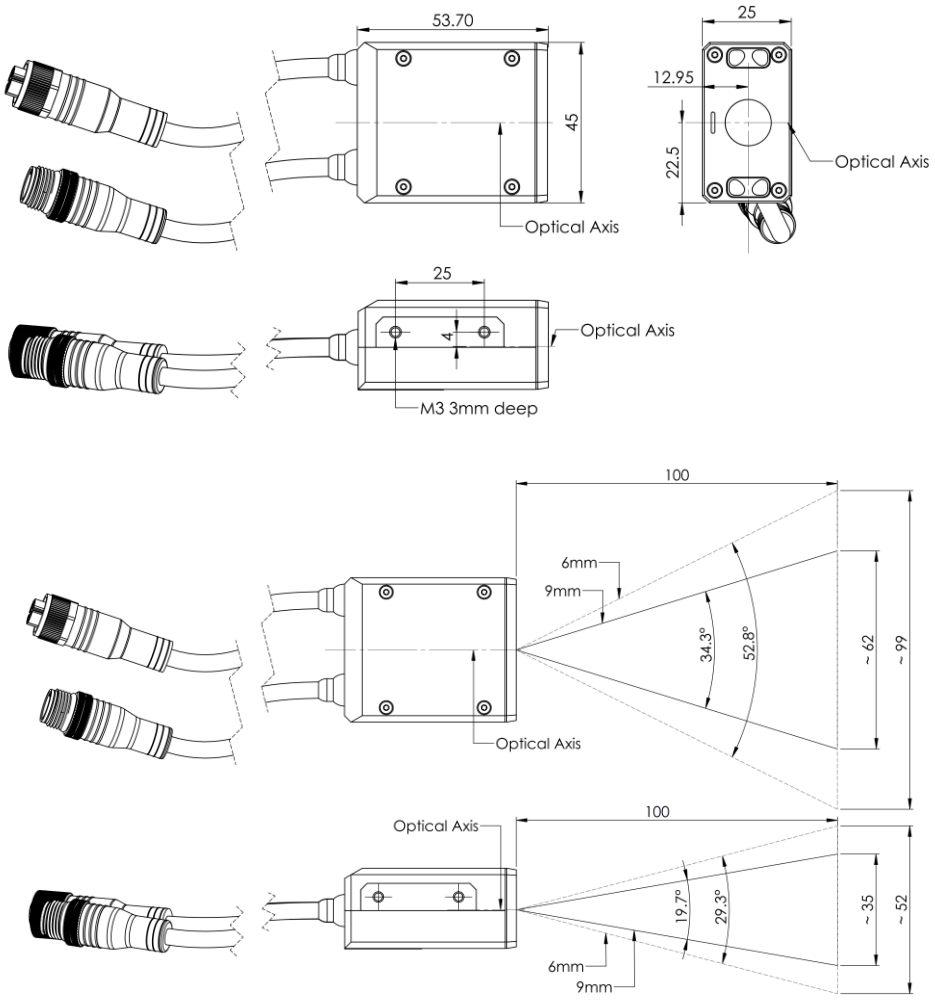
Mechanical / Electrical

Ethernet Cable	0.5 m, M12 8 pin
I/O & Power Cable	0.5 m, M12 8 pin
Min. Cable Bending Radius	30mm (recommended)
Power Supply	24 V_{DC} (21 V_{DC} – 28 V_{DC})
Supply Current @24V	0.5A
Dimension W × D × H	45 mm × 54 mm × 25 mm
Weight	125 g (incl. cable)
Temperature Range	+5 °C … +40 °C
Mounting	4 × M3

LED Strobe

White LED	4 internal high-brightness LEDs
Pulse Duration	Synchronized with shutter

Dimensional Drawing and FOV for 9mm and 6mm S-Mount Lens



The smartest embedded vision components

For more than 25 years, IMAGO has been supplying machine vision technology to machine builders to improve product quality, make processes smoother, avoid production errors, reduce manufacturing costs and make systems more efficient.

What we do

With the focus on what counts for our customers, we develop hardware components for industrial image processing. Be it in factory automation, the printing industry, for the food and beverage industry, pharmaceutical or logistics industry. IMAGO supplies vision systems, smart cameras, vision sensors and the appropriate software for the optimized use of our products. We pay special attention to miniaturization, high frame rates, increasing computing power and environmentally friendly power consumption. These characteristics already distinguish our products today.
And we are proud of them.