CMOS GIGABIT ETHERNET CAMERA

Product Family Gigabit Ethernet Mini Camera

GK1175-C   QXGA / 3 megapixel / color

Description

The Gigabit-Ethernet Mini Camera GK1175 designed for industrial and scientific image processing tasks. The camera is a part of the ABS CMOS camera family with different features for various applications. Typical fields of application for the 3 megapixel camera are high-resolution measurement technique, microscopy, documentation and surveillance.

The short-circuit-proof opto-decoupled digital outputs and opto-decoupled digital inputs are advantageous in order to use the camera under harsh environmental conditions.

The fast Gigabit Ethernet interface allows the transmission of a maximum of 12,6 noncompressed live images per second at full sensor resolution. Thus the user has the possibility to implement image processing applications without using an additional frame grabber. With the integrated high performance DSP developers may realize image processing or image pre-processing tasks directly in the camera.

The Gigabit Ethernet interface allows the user a cable length up to 100 m (directly connected). Inside a network the cable reach can be unlimited.

The camera can be optionally equipped with an optical fiber interface which extends cable reach up to 500 m.
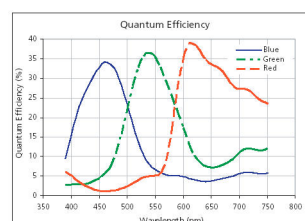
Application Fields

- high-resolution microscopy or measurement camera
- high-quality documentation camera / surveillance camera
- application under harsh industrial conditions
- stand-alone intelligent optical sensor

Sensor Frame Rates

Image resolution			Frame rate
2048	×	1536	13 fps
1280	×	1024	27 fps
1024	×	768	43 fps
640	×	480	92 fps

Sensor Sensitivity

Technical Specifications

Sensor	1/2", CMOS, progressive scan, color (BAYER pattern)
Sensor resolution	2048 × 1536 pixels (QXGA)
Pixel size	3,2 µm × 3,2 µm
Frame rate camera	12,6 fps at 2048 × 1536 pixels
Shutter type	rolling shutter
Exposure time	100 µs to 3 s
ADC resolution	10 bit
Gain	1 to 128×
Image dynamics	60 dB
DSP power	1200 MMAC
Image memory	32 MB / 10 images (2048 × 1536 pixels)
Data interface	Gigabit Ethernet
Power supply	Power-over-Ethernet (PoE) or wide-range input 8 – 24 Volt
Power consumption	typically 5 W
Operating temperature	+0°C to +50°C
Storage temperature	-20°C to +70°C
Dimensions	31,4 mm × 45 mm × 95 mm
Weight	appr. 150 g (without lens)
Lens mounting	C-mount / adjustable
Optional	▪ digital input 2× opto-decoupled (programmable) 1× TTL trigger input (fast)
	▪ digital output 2× opto-decoupled (programmable as strobe)
	▪ temperature sensor
	▪ RS232 connection
	▪ optical fiber connection (2× LC)

Dimensions

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Design and specification may change without notice