

PCIe CCD CAMERA



Product family PCI Express Camera

PK51135-C 1 Megapixel / color
 PK51135-M 1 Megapixel / monochrome

Description

The PK51135 device is a compact CCD camera designed for industrial and scientific image processing tasks. The camera is a part of the ABS CCD camera family with different features for various applications. Typical fields of application for the 1 Megapixel camera are high resolution measurement technique, microscopy, documentation and surveillance.

The sensor provides high signal-to-noise ratio even at poor lighting conditions. The global shutter allows to capture images of fast moving objects.

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

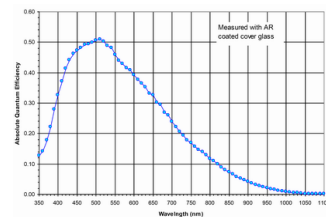
The fast PCIe interface allows the transmission of a maximum of 120 noncompressed live images per second at full sensor resolution. With the integrated high performance DSP developers may realize image processing or image pre-processing tasks directly in the camera.

Application

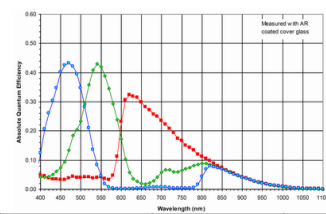
- for application with poor light conditions
- light-sensitive measurement and microscope camera
- documentation camera / surveillance camera
- stand-alone intelligent optical sensor

Spectral response of the sensor

PK51135-M



PK51135-C



Technical specifications

Sensor	1/2", CCD, progressive scan, monochrome or color (BAYER pattern)
Sensor resolution	1024 × 1024 pixel
Pixel size	5,5 µm × 5,5 µm
Frame rate camera	120 fps at 1024 × 1024 pixel
Shutter type	Global shutter
Exposure time	61 µs bis 1,7 s, long-time exposure until 5 min
ADC resolution	8 bit / 10 bit / 12 bit / 14 bit
Gain	1 bis 32x
Data interface	PCIe (PCI express)
Power supply	12 V
Power consumption	typ. 8 W
Operating temp.	+ 0 °C to + 55 °C
Storage temp.	-20 °C to + 70 °C
Dimensions	95,4 mm × 92,0 mm × 78 mm
Weight	appr. 740 g
Lens mounting	C-mount, optional M42×1 thread
Control interface	<ul style="list-style-type: none"> ▪ Digital inputs: <ul style="list-style-type: none"> 2× opto-decoupled (freely programmable) 1× TTL trigger input (fast) ▪ Digital outputs <ul style="list-style-type: none"> 2× opto-decoupled (programmable as strobe) ▪ Temperature sensor ▪ RS232 interface
Options	<ul style="list-style-type: none"> ▪ Internal fans ▪ TEC cooling ▪ Special housings
Accessories	<ul style="list-style-type: none"> ▪ PCIe expansion card for PC ▪ PCIe connection cable with power supply

Assembly dimensions

