

DVI CCD CAMERA

Product Family DVI Cameras

DK51165-C 4 Megapixel / color
 DK51165-M 4 Megapixel / monochrome



Description

The DK51165-C is a high-quality 4 Megapixel camera which can be connected directly to a digital monitor via DVI/HDMI interface. It combines the simplicity of operation with the high image quality and sophisticated image processing possibilities of digital cameras.

Typical fields of application for the highly sensitive camera are high resolution microscopy, and high quality surveillance with integrated PTZ functionality.

The short latency time between image capture and image display at the monitor allows direct manipulation of the object of observation without disturbing delays.

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

Image enlargements up to $\times 4$ are lossless due to the high resolution of the sensor.

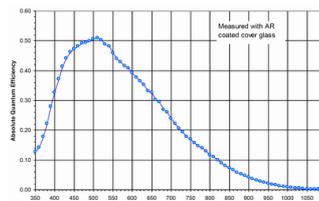
The short-circuit-proof opto-decoupled digital outputs and opto-decoupled digital inputs are advantageous in order to use the camera under rough environmental/industrial conditions. With the integrated high performance DSP developers may realize image processing or image pre-processing tasks directly in the camera.

Application

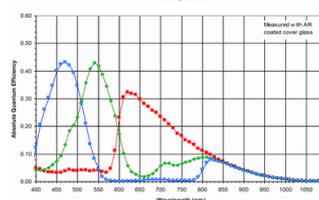
- workstations for visual inspection
- light-sensitive microscopy camera
- high-resolution surveillance camera
- PTZ camera with zoom factor 4

Spectral response of the sensor

DK51165-M



DK51165-C



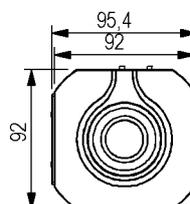
Technical specifications

Sensor	1", CCD, progressive scan, monochrome or color (BAYER pattern)	
Sensor resolution	2336 × 1752 pixel	
Pixel size	5,5 μm × 5,5 μm	
Frame rate camera	60 fps at 1920 x 1080 pixel, ratio 16:9	
	60 fps at 1024 x 768 pixel, ratio 4:3	
	60 fps at 1280 x 720 pixel, ratio 16:9	
Shutter type	Global shutter	
Exposure time	38 μs bis 1,7 s, long-time exposure until 5 min	
ADC resolution	8 bit / 10 bit / 12 bit / 14 bit	
Gain	1 bis 32×	
Data interface	DVI - I	
Control interface	RS232	
Power supply	12 V	
Power consumption	typ. 8 W	
Operating temp.	+ 0 °C bis + 55 °C	
Storage temp.	-20 °C bis + 70 °C	
Dimensions	95,4 mm × 92,0 mm × 78 mm	
Weight	742 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 	
Options	<ul style="list-style-type: none"> ▪ Special housings ▪ Cooling by TEC or internal fan 	

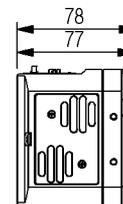
Assembly dimensions



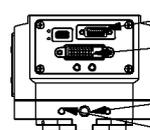
Front view



Side view



Top view



- IO-Connector, Micro-D-Sub
- DVI-Connector
- Tripod socket, thread 1/4-20 UNC
- Thread hole M4 x6 (2 x on each side)