CMOS-USB2.0-CAMERA

Productfamily Cylindrical Camera

UK1375- C-E01 QXGA / 3 MegaPixel / color

Description

The watertight UK1375 Cylindrical Camera is a compact CMOS color camera designed for industrial and scientific image processing tasks. The camera is part of the ABS CMOS camera family with different features for various applications. Typical fields of application for the 3 megapixel cameras are high resolution measurement, microscopy, documentation and surveillance.

The rugged cylindrical body and the IP 65/IP 67 protection provides additional application fields. Thus the camera can be operated in wet or dusty environment. For taking and saving picture of fast moving objects using a flashlight is recommended (rolling shutter).

The fast USB2.0 interface allows the transmission of maximum a 10 of 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. The sensor provides frame rates up to 90 frames per second depending on the resolution.. With the integrated high performance DSP developers may realize image processing or image pre-processing tasks directly in the camera.
The built-in memory is able to save up to 10 images and provides the possibility to uncouple image capturing and transmission.

Application

- high-resolution measurement camera
- high-quality documentation camera
- high-quality surveillance camera

Special Features

The dust- and waterproff case of the camera allows the application of the camera in wet and dusty environment, for example machines or outdoor.
The lens is mounted inside the camera case and also water- and dustproof.
The UK1375 endure the oil jet in the near of a broken hydraulic tube.
The standard lens mounting (C-Mount) allows the using of many high quality lenses with a focal length between 6 mm and 50 mm. The minimum optical distance can be appr. 10 cm with short focal length lenses.

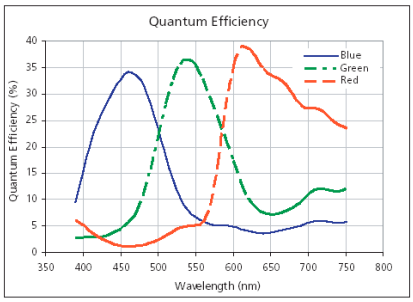
Ordering

Order number	Description
UK1375-C-E01	USB2.0 Cylindrical Camera 3 MegaPixel

Technical specification

Sensor	½", CMOS, progressive scan, color (BAYER-Pattern)
Sensor resolution	2048 x 1536 Pixel (QXGA)
Pixelsize	3,2 µm x 3,2 µm
Frame rate camera (depend on PC)	8,5 fps 2048 x 1536 Pixel 32 fps 1024 x 768 Pixel 83 fps 640 x 480 Pixel
Frame rate sensor (camera internal)	12,6 fps 2048 x 1536 Pixeln 42,6 fps 1024 x 768 Pixeln 91,6 fps 640 x 480 Pixeln
Shutter type	Rolling Shutter
Exposure time	97 µs bis 3 s (optional up to 50 s)
A/D resolution	8 bit / 10 bit
gain	1 – 128 x
Dynamic	60 dB
DSP power	1200 MMAC
Image memory	32 MByte / 10 Bilder (2048 x 1536 Pixel)
Data interface	USB2.0 (High Speed)
Power supply	USB bus powered
Power consumption	typ. 1,6 W
Operating temp.	+ 0 °C bis + 55 °C
Storage temp.	-20 °C bis + 70 °C
Weight	appr. 235 g (without lens)
Lens mounting	C-Mount / adjustable
Protection	IP65 / IP67

Spectral Response of the sensor



Assembly dimensions

Diameter : 39,6 mm
35,0 mm (optional)

Length : appr. 150 mm
(with protection cap and incl. lens)

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Design and specification may change without notice