

CMOS-USB2.0-CAMERA

Productfamily Flat Body Camera

UK1255-C

QXGA / 1,3 MegaPixel / monochrome



Description

The UK1255 Flat Body Camera is a compact CMOS color camera 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 1,3 megapixel cameras are high resolution measurement, microscopy, documentation and surveillance.

The flat body allows assembly flexibility in cases with sparse room in machines or facilities. 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 a maximum of 20 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. Thus the camera can be used as a stand-alone intelligent optical sensor.

The built-in memory is able to save up to 25 images and provides the possibility to decouple image capturing and transmission.

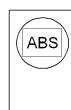
Application

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

Order information

Order number	Description
UK1255- 0-C	Flat Body Camera sensor orientation 0°
UK1255-90-C	Flat Body Camera sensor orientation 90°

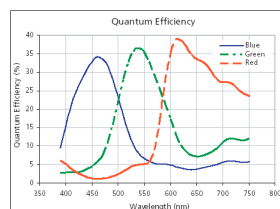
sensor orientation 0 °



sensor orientation 90 °



Spectral response of the sensor



Technical specification

Sensor	1/2", CMOS, progressive scan, monochrome
Sensor resolution	1280 x 1024 Pixel (SXGA)
Pixelsize	5,2 µm x 5,2 µm
Frame rate camera (depend on PC)	20 fps 1280 x 1024 Pixel (SXGA) 32 fps 1024 x 768 Pixel (XGA) 82 fps 640 x 480 Pixel (VGA)
Frame rate sensor	30 fps 1280 x 1024 Pixel (SXGA) 47 fps 1024 x 768 Pixel (XGA) 106 fps 640 x 480 Pixel (VGA)
Shutter type	rolling shutter
Exposure time	59 µs to 520 ms
ADC resolution	8 bit / 10 bit
Gain	1 – 15 x
Dynamic	68 dB
DSP power	1200 MMAC
Image memory	32 MB / 25 images (1280 x 1024 Pixel)
Dat interface	USB2.0 (High Speed)
Power supply	USB bus powered
Power consumption	typ. 1,6 W
Operating temp.	+ 0 °C to + 55 °C
Storage temp.	-20 °C to + 70 °C
Dimensions	31,4 mm x 45 mm x 50 mm
Weight	appr. 110g (without lens)
Lens mounting	C-Mount / adjustable
USB-Driver	Windows® 2000 Windows® XP (32 bit / 64 bit Version) Windows® VISTA (32 bit / 64 bit Version) Windows® 7 (32 bit / 64 bit Version)

Assembly dimensions

