

CMOS-USB2.0-CAMERA

Productfamily Mini Camera

UK1116-C Wide-VGA / color
 UK1116-M Wide-VGA / monochrome



Description

The Mini Camera UK1116 is a compact CMOS 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 Wide-VGA camera are high resolution measurement technique, microscopy, documentation and surveillance.

The global shutter allows to capture images of fast moving objects.

The camera is available as color and monochrome version. The small body allows assembly flexibility in cases with little space in machines or facilities.

Optional opto-decoupled input and output ports permit camera operation even under harsh environmental conditions.

The fast USB2.0 interface allows the transmission of a maximum of 62 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 higher frame rates depending on the resolution. With the integrated high performance DSP developers may realize image processing or image pre-processing tasks directly in the camera.

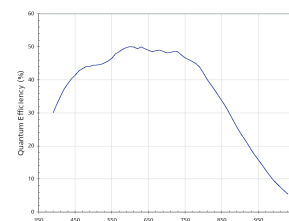
The built-in memory is able to save up to 64 images and provides the possibility to decouple image capturing and transmission.

Application

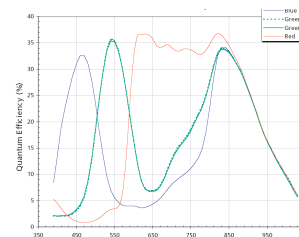
- automotive
- automation
- surveillance with high dynamic
- measurement technique camera

Spectral response of the sensor

UK1116-M



UK1116-C



Technical specification

Sensor	1/3", CMOS, progressive scan, monochrome or color (BAYER-Pattern)
Sensor resolution	752 x 480 Pixel (Wide-VGA)
Pixelsize	6,0 µm x 6,0 µm
Frame rate	typ. 62 fps (752 x 480 Pixel) typ. 72 fps (640 x 480 Pixel)
Shutter type	Global Shutter
Exposure time	51 µs to 1 s
ADC resolution	8 bit / 10 bit
Gain	1 to 15 x
Dynamic	> 55 dB (optional >100 dB HDR-Mode)
DSP power	1200 MAC
Image memory	32 MB / 64 images (752 x 480 Pixel)
Data interface	USB2.0 (High Speed)
Power supply	USB bus powered
Power consumption	typ. 1,6 W
Operating temp.	+ 0 °C to + 55 °C -40 °C to + 85 °C (optional)
Storage temp.	-40 °C to + 85 °C
Dimensions	31,4 mm x 45 mm x 50 mm
Weight	appr. 80g (without lens)
Lens mounting	C-Mount / adjustable
Optional	<ul style="list-style-type: none"> ▪ digital input 2x optical-decoupled (free programmable) 1x TTL trigger input (fast) ▪ digital output 2x optical-decoupled (programm. as strobe) ▪ temperature sensor near image sensor ▪ RS232-connection

Assembly dimensions

