

CCD-USB2.0-CAMERA

Produktfamily USB2.0-Mini camera

UK1157- C SXGA+ / 1.4 MegaPixel / color
UK1157- M SXGA+ / 1.4 MegaPixel / monochrome



Description

The Mini Camera UK1157 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 1,4 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 image capture 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.

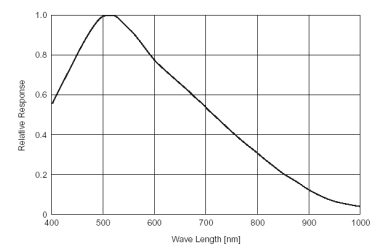
The fast USB2.0 interface allows the transmission of a maximum of 15 noncompressed live images per second at full sensor resolution. Thus the user has the possibility to implement image processing applications without using an additional frame grabber. With the integrated high performance DSP developers may realize image processing or image pre-processing tasks directly in the camera. The built-in memory is able to save up to 23 images and provides the possibility to decouple image capturing and transmission.

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

UK1157-M



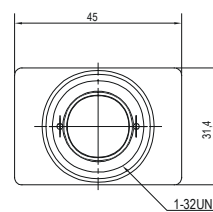
Technical specifications

Sensor	1/2", CCD, progressive scan, monochrome or color (BAYER-Pattern)
Sensor resolution	1360 x 1024 Pixel (SXGA+)
Pixelsize	4,65 µm x 4,65 µm
Frame rate camera (depend on PC)	15 fps 1360 x 1024 Pixel (SXGA+) 19 fps 1024 x 768 Pixel (XGA) 29 fps 640 x 480 Pixel (VGA)
Shutter type	global shutter
Exposure time	80 µs to 100 s
ADC resolution	8 bit / 10 bit / 12 bit
Gain	1 to 8 x
DSP power	1200 MMAC
Image memory	32 MB / 23 images (1360 x 1024 Pixel)
Data interface	USB2.0 (High Speed)
Power supply	USB bus powered
Power consumption	typ. 2,3 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. 80g (without lens)
Lens mounting	C-Mount / adjustable
Optional	<ul style="list-style-type: none">▪ digital input2x optical-decoupled (free programmable)1x TTL trigger input (fast)▪ digital output2x optical-decoupled (programm. as strobe)▪ temperature sensor near image sensor▪ RS232-connection

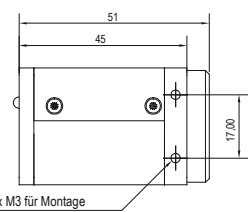
Assembly dimensions



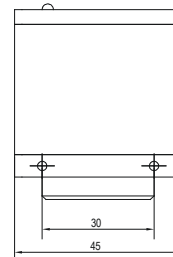
Front view



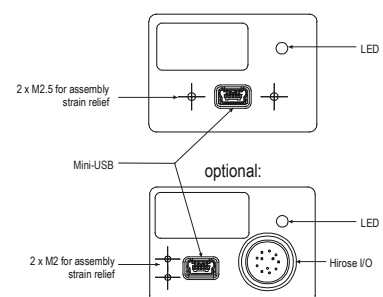
Side view



Top view



Back view



Wfine CCD is trademark of Sony corporation.