

CMOS-USB2.0-CAMERA

Productfamily USB2.0- Mini camera

UK1155-M SXGA / 1,3 MegaPixel / monochrome



Description

The Mini Camera UK1155 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 1,3 megapixel camera are high resolution measurement technique, microscopy, documentation and surveillance.

The camera is available as 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 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 up to 106 frame 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.

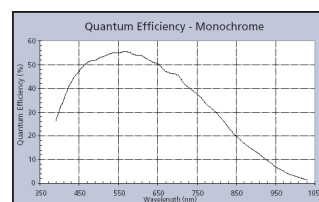
The built-in memory is able to save up to 25 images and provides the possibility to decouple image capturing and transmission.

Applications

- high-resolution microscopy and measurement camera
- high-quality documentation camera
- high-quality surveillance camera
- stand-alone intelligent optical sensor

Spectral response of the sensor

UK1155-M



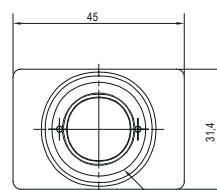
Technical specifications

| | |
|----------------------------------|--|
| 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. 80 g (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 |

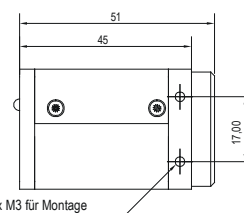
Assembly dimensions



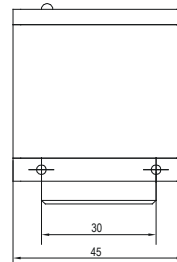
Front view



Side view



Top view



Back view

