

# CMOS-Digital-Camera

## Mini Camera Data Sheet



### UK1155-M SXGA monochrome

The UK1155 Mini Camera is a compact CMOS monochrome camera designed for industrial and scientific image processing tasks. The camera is part of the EHD 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.

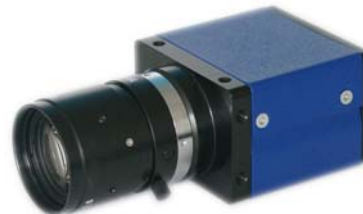
Optional opto-decoupled input and output ports permit camera operation even under harsh environmental conditions.

The small body allows assembly flexibility in cases with little space in machines or facilities.

The fast USB2.0 interface allows the transmission of a maximum of 30 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 100 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 16 images and provides the possibility to decouple image capturing and transmission.

Pixel resolution	1280 × 1024
CMOS sensor	1/2"
Frame rate (sensor)	30 fps [at 1280 × 1024]
Shutter	rolling shutter
Exposure time	60 µs bis 0,5 s
Pixel size	5.2 µm × 5.2 µm
A/D resolution	10 bit
Data interface	USB 2.0
Processor	built-in DSP
Image memory	32 Mbyte
Power supply	USB bus powered
Dimensions	31 mm × 45 mm × 50 mm
Lens mounting	C-mount



### Sensor Frame Rate

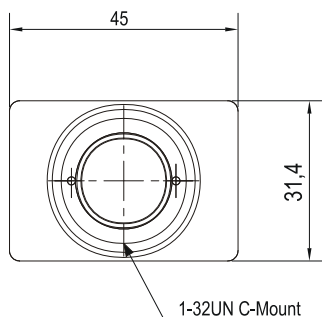
Resolution	1280×1024	1024×768	800×600	640×480
Frame rate	30 fps	45 fps	70 fps	100 fps

## Technical Specifications

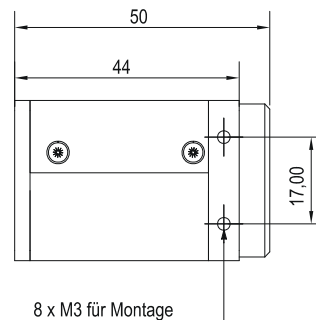
Sensor	1/2" CMOS progressive scan, monochrome 1/2" CMOS progressive scan, color, BAYER pattern
Resolution	1280 × 1024 (SXGA)
Pixel size	5.2 μm × 5.2 μm
Lens mounting	C-mount
Frame rate	- 30 fps at 1280 × 1024 pixel (within camera) - typically 20 fps in "Continuos" mode at 1280 × 1024 over USB2.0 (dependent on PC) - higher frame rates at lower resolutions
Electronic shutter	rolling shutter
Exposure time	60 μs bis 0,5 s
Gain	1 - 15
Dynamic range	68 dB
Built-in memory	32 MByte
DSP power	1200 MMAC
HOST interface	USB2.0 (mini-USB plug)
Power supply (camera)	USB bus powered
Power loss	typically 1,6 W
Temperature range (operational)	0°C to 55 °C
Temperature range (store)	-20°C to +70°C
Dimensions	31 mm × 45 mm × 50 mm
Weight	80 g (without lens)

## Dimensions

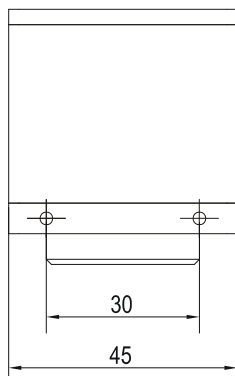
Frontansicht



Seitenansicht



Oben



Rückansicht

