CCD USB2.0 CAMERA

Product Family Mini Camera

UK1158-C	SXGA+ / 1.4 megapixel / color
UK1158-M	SXGA+ / 1.4 megapixel / monochrome

Description

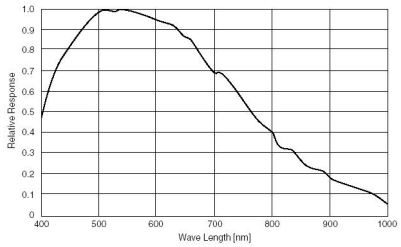
The Mini Camera UK1158 is a compact CCD camera designed for industrial and scientific image processing tasks. The camera is a part of the ABS CCD camera family with different features for various applications. Typical fields of application for the 1,4 megapixel camera are high resolution measurement technique, microscopy, documentation and surveillance.
The *Exview* HAD CCD$_{TM}$ technology sensor provides high signal-to-noise ratio even at low-light 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 harsh 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

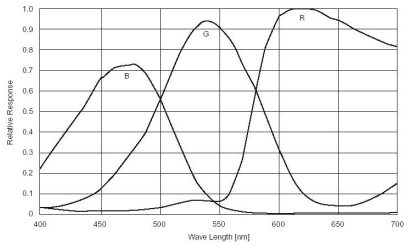
- for applications under low-light conditions
- light-sensitive microscopy or measurement camera
- documentation camera / surveillance camera
- stand-alone intelligent optical sensor

Spectral Response of the Sensor

UK1158-M



UK1158-C

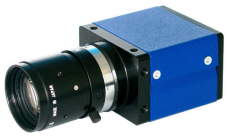


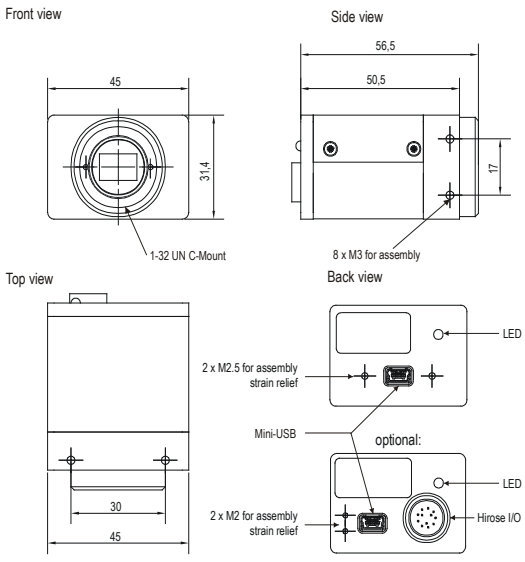
Technical Specifications

Sensor	2/3", CCD, progressive scan, monochrome or color (BAYER pattern)
Sensor resolution	1360 × 1024 pixels (SXGA+)
Pixel size	6,45 µm × 6,45 µm
Frame rate camera	15 fps (1360 × 1024 Pixel (SXGA+)) 19 fps (1024 × 768 Pixel (XGA)) 27 fps (640 × 480 Pixel (VGA))
Shutter type	global shutter
Exposure time	20 µs to 180 s (optional up to 270 s)
ADC resolution	12 bit
Gain	1 to 8×
DSP power	1200 MMAC
Image memory	32 MB / 20 images (1360 × 1024 pixels)
Data interface	USB2.0 (High Speed)
Power supply	USB bus powered
Power consumption	typically 2,4 W
Operating temperature	+ 0 °C to + 55 °C
Storage temperature	-20 °C to + 70 °C
Dimensions	31,4 mm × 45 mm × 56 mm
Weight	appr. 116 g (without lens)
Lens mounting	C-Mount
Optional	▪ digital input 2× opto-decoupled (free programmable) 1× TTL trigger input (fast)
	▪ digital output 2× opto-decoupled (programmable as strobe)
	▪ temperature sensor
	▪ RS232-connection

Exview HAD CCD is trademark of Sony corporation.

Assembly Dimensions





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Design and specification may change without notice