

# CCD-USB2.0-CAMERA

## Productfamily 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™ technology 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 conditions.

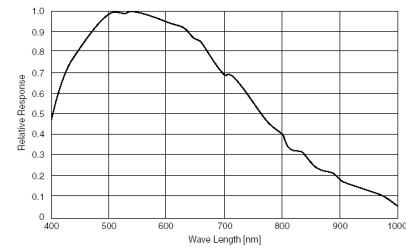
The fast USB2.0 interface allows the transmission of a maximum of 15 noncompressed live images per second at full sensor resolution. Thus the user has the possibility to implement image processing applications without using an additional frame grabber. With the integrated high performance DSP developers 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

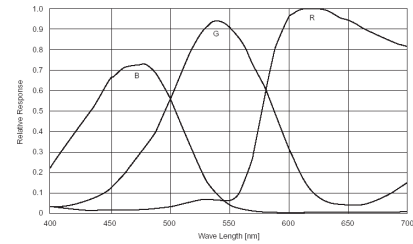
- for applications with poor lighting conditions
- light-sensitive microscopy- or measurement camera
- documentation camera / surveillance camera
- stand-alone intelligent optical sensor

### Spectral response of the sensor

UK1158-M



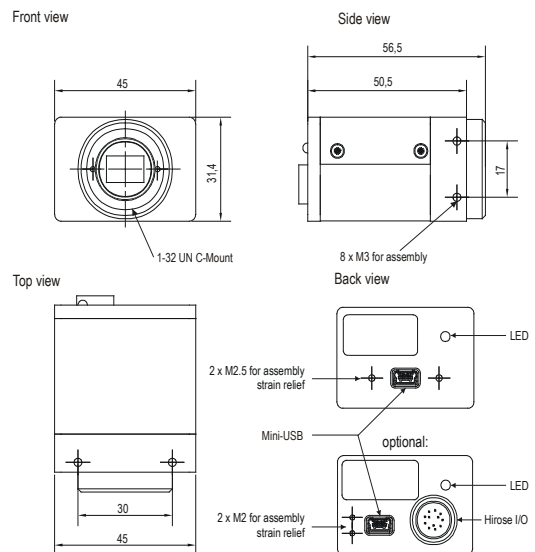
UK1158-C



### Technical specifications

|                                  |  |
|----------------------------------|--|
| Sensor                           | 2/3", CCD, progressive scan, monochrome or color (BAYER-Pattern)   |
| Sensor resolution                | 1360 x 1024 Pixel (SXGA+)  |
| Pixel size                       | 6,45 µm x 6,45 µm  |
| Frame rate camera (depend on PC) | 15 fps (1360 x 1024 Pixel (SXGA+))<br>19 fps (1024 x 768 Pixel (XGA))<br>27 fps ( 640 x 480 Pixel (VGA))   |
| Shutter type                     | global shutter   |
| Exposure time                    | 20 µs / 43 µs / 74µs to 100 s  |
| ADC resolution                   | 8 bit / 10 bit / 12 bit  |
| Gain                             | 1 to 16 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. 2,4 W   |
| Operating temp.                  | + 0 °C to + 55 °C  |
| Storage temp.                    | -20 °C to + 70 °C  |
| Dimensions                       | 31,4 mm x 45 mm x 56 mm  |
| Weight                           | appr. 116 g (without lens)   |
| Lens mounting                    | C-Mount  |
| Optional                         | <ul style="list-style-type: none"> <li>▪ digital input</li> <li>2x optical-decoupled (free programmable)</li> <li>1x TTL trigger input (fast)</li> <li>▪ digital output</li> <li>2x optical-decoupled (programm. as Strobe)</li> <li>▪ temperature sensor near image sensor</li> <li>▪ RS232-connection</li> </ul> |

### Assembly dimensions



*Exview HAD CCD is trademark of Sony corporation.*