

CCD GIGABIT ETHERNET CAMERA

Product Family Gigabit Ethernet Mini Camera

GK1158-C SXGA+ / 1.4 megapixel / color
 GK1158-M SXGA+ / 1.4 megapixel / monochrome



Description

The Gigabit-Ethernet Mini Camera GK1158 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 under 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 Gigabit Ethernet 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 Gigabit Ethernet interface allows the user a cable length up to 100 m (directly connected). Inside a network the cable reach can be unlimited.

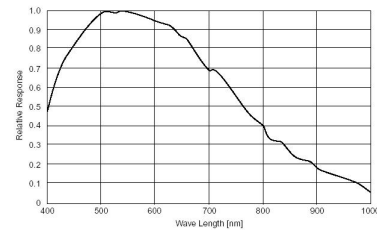
The camera can be optionally equipped with an optical fiber interface which extends cable reach up to 500 m.

Application Fields

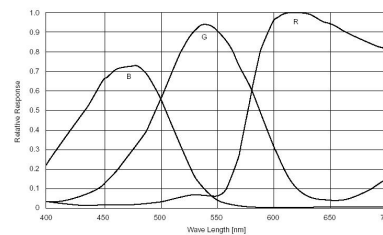
- for applications under low-light conditions
- light-sensitive microscopy or measurement camera
- documentation camera / surveillance camera
- application under harsh industrial conditions
- stand-alone intelligent optical sensor

Sensor Sensitivity

GK1158-M



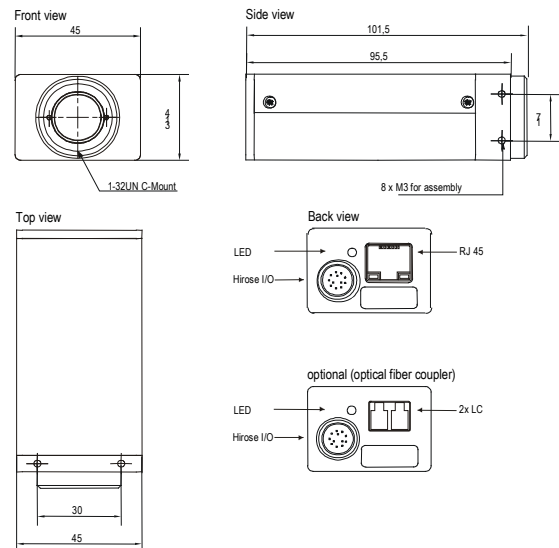
GK1158-C



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 pixels (SXGA+))
Shutter type	global shutter
Exposure time	20 µs to 180 s (optional up to 270 s)
ADC resolution	8 bit / 10 bit / 12 bit
Gain	1 to 8 x
DSP power	1200 MMAC
Image memory	32 MB / 20 images (1360 × 1024 pixels)
Data interface	Gigabit Ethernet
Power supply	Power-over-Ethernet (PoE) or wide-range input 8 – 24 Volt
Power consumption	typically 5 W
Operating temperature	+ 0 °C to + 50 °C
Storage temperature	- 20 °C to + 70 °C
Dimensions	31,4 mm × 45 mm × 101,5 mm
Weight	approx. 200 g (without lens)
Lens mounting	C-Mount (adjustable)
Optional	<ul style="list-style-type: none"> ▪ digital input ▪ 2× opto-decoupled (programmable) ▪ 1× TTL trigger input (fast) ▪ digital output ▪ 2× opto-decoupled (programmable as strobe) ▪ temperature sensor ▪ RS232-connection ▪ optical fiber connection (2× LC)

Dimensions



Exview HAD CCD is trademark of Sony corporation.