

ILA.PIV.μEye CMOS Camera



The ILA.PIV.μEye is a very small, flexible and easy to use CMOS camera with:

- interframing time as low as 200 μ s (water or other low speed flow applications are recommended)
- Standard USB-C link (Notebook/Laptop) can be used for recording instead of large PC workstations
- 12 bit dynamic range
- >60% quantum efficiency

Now, you are prepared for almost every PIV task at hand. To facilitate camera setup a remote focus control is directly integrated.

Adjust your Canon EF lens precisely via our intuitive software without the need to access the camera anymore.

Datasheet
June 2024

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ILA5150
GmbH

ILA.PIV.µEye CMOS Camera

General

power supply	USB Power Delivery, 5-15 V
power consumption	1.8 W - 3.1 W
weight	115 g
operating temp.	+10 °C .. +40 °C
operating humidity	20% .. 80% (non-condensing)
storage temp range	-20 °C .. +60 °C
optical interface	C-mount*
CE / FCC certified	yes
* Other mounts available upon request	

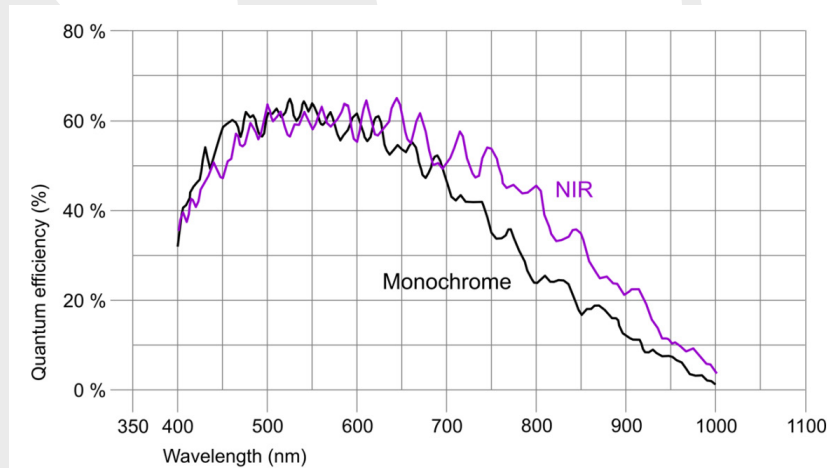
Camera

Exposure / shutter time	0.038 ms - 500 ms
interframing time	as low as 200 µs
dynamic range A/D	12 bit
pixel scan rate	38 MHz – 344 MHz
Frame rates:	
- Free run modus	80 fps
- Triggered	80 fps
- Maximum	80 fps
trigger input signals	frame or sequence trigger
trigger output signals	exposure, busy
data interface	USB Type-C, screwable

Image Sensor

type of sensor	CMOS Mono
image sensor	CMV4000-3E5M
Readout mode	Progressive Scan
resolution (h x v)	2048 x 2048 pixel
pixel size (h x v)	5.5 µm x 5.5 µm
sensor size	11.264 mm x 11.264 mm
diagonal	15.93 mm (1/1")
shutter modes	Global shutter
quantum efficiency	>60% @ peak
spectral range	400 nm .. 1000 nm
Gain	4x
AOI horizontal	Max. frame rate
AOI vertical	Increased frame rate
AOI image width. / step	16/4
AOI image height / step	2/2
AOI pos. grid (hor./vert.)	2/2

Quantum efficiency [%]



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