

**It's so easy**

**uEye® CMOS Cameras**



# USB2.0 CMOS Camera family

**Monochrome or Colour with Global or Rolling Shutter  
for Machine Vision and Medical Applications**

**Your Eye in Machine Vision**

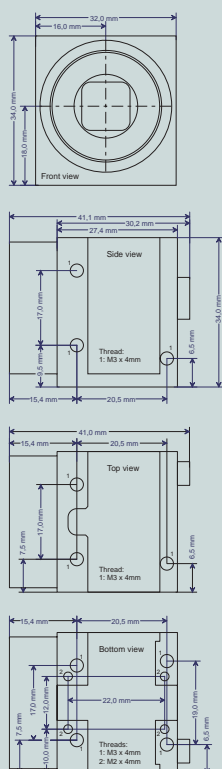
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**ELECTRONIC GROUP, INC**  
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<http://www.aegis-elec.com>

- 640 x 480 pixel (VGA) up to 2048 x 1536 (QXGA)
- High quality CMOS sensors with square pixels, Global or Rolling Shutter
- Up to 68 frames/s in full frame mode, over 100 frames/s using Area of Interest (AOI)
- External, universal trigger input, digital output
- uEye SDK (compatible to the FALCON SDK) and demo programs in scope of supply
- C-Mount
- Ultra small size and less weight: 34 x 32 x 27,4 mm (HxWxD), 62g
- Camera control via USB 2.0
- Mini-B USB AND screwable Micro D-SUB connector for industrial use
- Driver and Interfaces: Windows and Linux SDK, Twain, ActiveX, Direct Show (WDM), ActiVisionTools, Common Vision Blox, HALCON and NeuroCheck
- OEM modules available



## USB2.0 Camera



CAMERA SPECIFICATIONS:							
	UI-1210-M/C	UI-1220-M/C	UI-1410-M/C	UI-1440-M/C	UI-1540-M/C	UI-1450-C	UI-1460-C
Resolution (pixels)	640x480	752x480	640x480	1280x1024	1280x1024	1600x1200	2048x1536
M - Model (Monochrome)	Yes					No	
C - Model (Colour)	Bayer RGB Pattern						
Chip type / size	1/2 Zoll/8 mm	1/3 Zoll/6 mm	1/3 Zoll/6 mm	1/1.8 Zoll / 10mm	1/2 Zoll/8 mm	1/2 Zoll/8 mm	1/2 Zoll/8 mm
Cell size (HxV) in $\mu\text{m}$	9,9 x 9,9	6 x 6	7,5 x 7,5	6 x 6	5,2 x 5,2	4,2 x 4,2	3,2 x 3,2
Shutter	Global	Global			Rolling		
Scanning System	Progressive Scan						
Sensor dynamics	60 dB	60 dB	62 dB	57 dB	68 dB	61 dB	61 dB
Frames per second	55	68 75 at 640x480	35	16,5	25 72 at 640x480	16 50 at 800x600	10 32 at 1024x768
Binning	no	hor. & vert.	no	no	no	no	hor. & vert.
Subsampling	no	no	hor. & vert.	hor. & vert.	hor. & vert.	hor. & vert.	hor. & vert.
AOI	hor. & vert.	hor. & vert.	hor. & vert.	hor. & vert.	hor. & vert.	hor. & vert.	hor. & vert.
Mirror/Flip	vert.	hor. & vert.	vert.	hor. & vert.	vert.	vert.	vert.
Pixel Clock Frequency (Min/Max)	5/20 MHz	10/30 MHz	5/14 MHz	12/27 MHz	8/43 MHz	8/43 MHz	8/43 MHz
Shutter speed	100 $\mu\text{s}$ - 64,4ms	54 $\mu\text{s}$ - 280,8ms	56 $\mu\text{s}$ - 630ms	54 $\mu\text{s}$ - 4100ms	270 $\mu\text{s}$ - 580ms	368 $\mu\text{s}$ - 780ms	464 $\mu\text{s}$ - 780ms
Hardware Gain	1-18dB	0-6 dB	0-29 dB	0-5dB global 16dB RGB	0-12db	0-12db	0-12db
Hardware Trigger	asynchronous	-	asynchronous	synchronous	asynchronous	asynchronous	asynchronous
Lens mount	C-Mount						
IR Filter	Yes, removable						
Interface	USB 2.0						
Power supply	< 0.5 Watt	< 1 Watt	< 1 Watt	< 1 Watt	< 1 Watt	< 1 Watt	< 1 Watt
Operating temperature	0° - 50° Celsius						
Regulations	CE, FCC Class B						
Size (HxWxD)	34 x 32 x 27,4 mm without C-mount						
Weight	62 g						

### uEye Micro D-SUB connector Description

Pin	Assignment
1	Digital output -
2	Trigger input +
3	Shield
4	USB +5V
5	USB GND
6	Digital output +
7	Trigger input -
8	USB D+
9	USB D-

The uEye CMOS cameras are ultra compact cameras with USB 2.0 interface for industrial use. They are equipped with high quality sensors, industrial Design, C-Mount, a standard USB and additionally a screwable USB interfaces which offers also the trigger and digital output. Ready for professional use.

With the USB 2.0 architecture, the cameras are ideally suited for use with PC, Notebook and Embedded Systems in image processing, quality control and factory automation.

The powerful -free of charge- uEye SDK and the yet available drivers and Interfaces for popular machine vision software allow easy integration in applications. It's so easy!

### AVAILABLE DRIVER AND INTERFACES

Windows 2000 und XP: uEye SDK, TWAIN, ActiveX, Direct Show (WDM), ActiVisionTools, Common Vision Blox, HALCON, NeuroCheck. Linux: uEye SDK in Vorbereitung

### ACCESSORIES:

- USB cable
- Lenses
- USB2.0 Interfaces
- Software



The uEye cameras on the internet: [www.net-usa-inc.com](http://www.net-usa-inc.com)