

adept electronic

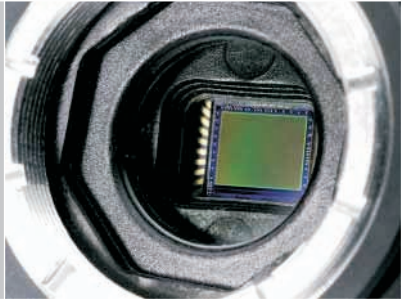
**adept electronic solutions**

**The Machine Vision and Imaging Specialists**

Perth: +61 (08) 9242 5411  
Sydney: +61 (02) 9979 2599  
Melbourne: +61 (03) 9555 5621  
Email: [adept@adept.net.au](mailto:adept@adept.net.au)  
Web: <http://www.adept.net.au>



**iDS**



Gigabit Ethernet uEye® UI-6410-C/M

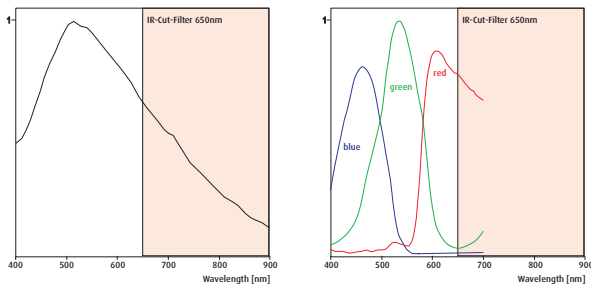
VGA Camera with 1/3" CCD Sensor

## Gigabit Ethernet uEye® UI-6410-M / UI-6410-C



### The Gigabit Ethernet uEye® family

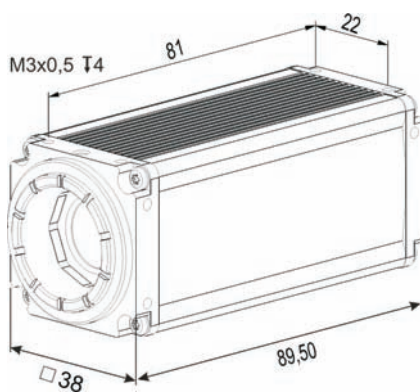
The Gigabit Ethernet uEye® extends the broad range of USB cameras by powerful models for sophisticated, complex machine vision and image processing applications. The bandwidth is 2.5 times higher than with USB and cable lengths up to 100 m are possible.



Sensor characteristics

UI-6410-M

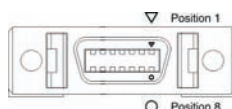
UI-6410-C



Dimensions of the Gigabit Ethernet uEye® models

#### Pin assignment MDR14 Multi I/O connector

Pin Notation	Description
1 GND	Ground
2 VCC	Power supply
3 TriggerGND	Trigger ground (potential-free)
4 TriggerIN	Trigger input (potential-free)
5 FlashOut	Flash output (potential-free)
6 Vext	External flash power supply (potential-free)
7 GND	Ground
8 GND	Ground
9 VCC	Power supply
10 GPIO1	General Purpose I/O 1 (not potential-free)
11 GPIO2	General Purpose I/O 2 (not potential-free)
12 RxD	RS232 Rx/D (not potential-free)
13 TxD	RS232 Tx/D (not potential-free)
14 GND	Ground



Power supply: 6 - 24V (12V recommended)

Connectors of the Gigabit Ethernet uEye® models



### The characteristics at a glance

Interface	Gigabit Ethernet
Sensor Technology	CCD (Sony)
Model description (color)	UI-6410-C
Model description (Mono)	UI-6410-M
Resolution (h x v)	640 x 480
Resolution Category / Pixel Class	VGA
Sensor size	1/3"
Shutter	Global
max. fps in Freerun Mode at full resolution	75 fps
max. fps in SW Trigger Mode at 1 ms exposure	66 fps
Exposuretime in Freerun Mode	40 µs - 640 ms
Exposuretime in Trigger Mode	40 µs - 10 min
AOI Modes	H + V <sup>2</sup>
AOI with 320 x 240 Pixels (CIF)	111 fps
Subsampling Modes	-
Subsampling Factors	-
Resolution, fps	-
Binning Modes	V <sup>2</sup> (Mono)
Binning Method	V: Sum
Binning Factors	x2, x4
Resolution, fps	640 x 240, 133 fps 640 x 120, 215 fps
Mono: Maximum Gain	18x
Color: Maximum Gain RGB/Master	4x /12x
Additional Gain Boost with Factor	2x (Mono)
Sensor Model	ICX424
Pixel Clock	5 - 30 MHz
Pixelpitch in µm	7,4
Full Well Capacity	24.000 e-
Optical Size	4,74 x 3,55 mm
Aspect Ratio	4:3
Exact Real Diagonal	5,9 mm, 1/2,7"

#### In scope of delivery:

Powerful, easy to handle uEye SDK  
uEye Demo and Programexamples  
executable and Source Code.  
uEye Camera Manager  
TWAIN, Active-X and Direct Show  
(WDM) drivers  
Interfaces for ActivVision Tools,  
Common Vision Blox, HALCON,  
LabVIEW and Neurocheck  
GenICam™ Interface<sup>2</sup>

<sup>2</sup> = Use increases frame rate  
<sup>\*</sup> = in preparation (end of 2007)

Driver for Windows 2000<sup>\*</sup>, XP, VISTA<sup>\*</sup>  
and Linux<sup>\*</sup>

