

adept electronic

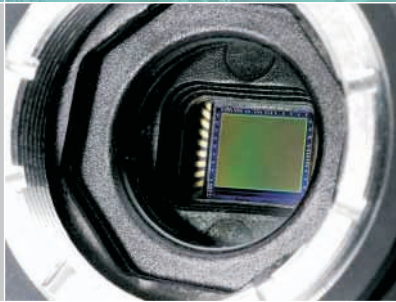
adept electronic solutions

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iDS



1280
1024

Gigabit Ethernet uEye® UI-5540-M

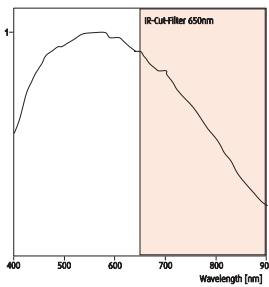
1,3 Mega pixels SXGA Camera with 1/2" CMOS Sensor

Gigabit Ethernet uEye® UI-5540-M



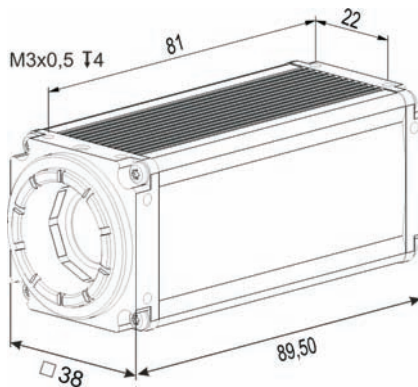
The Gigabit Ethernet uEye® family

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

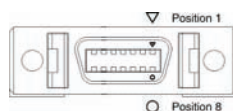
UI-5540-M



Dimensions of the Gigabit Ethernet uEye® models

Pin assignment MDR14 Multi I/O connector

Pin Notation	Description
1	GND
2	VCC
3	TriggerGND
4	TriggerIN
5	FlashOut
6	Vext
7	GND
8	GND
9	VCC
10	GPIO1
11	GPIO2
12	RxD
13	TxD
14	GND



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

Connectors of the Gigabit Ethernet uEye® models



The characteristics at a glance

Interface	Gigabit Ethernet
Sensor Technology	CMOS
Model description (color)	-
Model description (Mono)	UI-5540-M
Resolution (h x v)	1280 x 1024
Resolution Category / Pixel Class	SXGA
Sensor size	1/2"
Shutter	Rolling
max. fps in Freerun Mode at full resolution	35 fps
max. fps in SW Trigger Mode at 1 ms exposure	33 fps
Exposuretime in Freerun Mode	26 µs - 983 ms
Exposuretime in Trigger Mode	26 µs - 983 ms
AOI Modes	H ² + V ²
AOI with 320 x 240 Pixels (CIF)	320 fps
Subsampling Modes	H ² + V ²
Subsampling Factors	x2, x4
Resolution, fps	640 x 512, 110 fps 320 x 256, 305 fps
Binning Modes	-
Binning Method	-
Binning Factors	-
Resolution, fps	-
Mono: Maximum Gain	12x
Color: Maximum Gain RGB/Master	-
Additional Gain Boost with Factor	1,5x
Sensor Model	MT9M001
Pixel Clock	5 - 61 MHz
Pixelpitch in µm	5,2
Full Well Capacity	40.000 e-
Optical Size	6,66 x 5,32 mm
Aspect Ratio	5:4
Exact Real Diagonal	8,5 mm, 1/1,9"

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 Activision Tools,
Common Vision Blox, HALCON,
LabVIEW and Neurocheck
GenICam™ Interface*

* = Use increases frame rate
* = in preparation (end of 2007)

Driver for Windows 2000*, XP, VISTA*
and Linux*

