

## UI-5240CP-M-GL Rev.2.2 (AB12041)

In series

The model is in series and available for the long term.























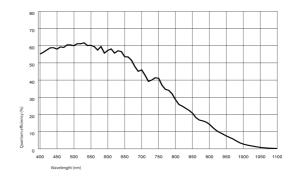


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. <u>Learn about the process here and switch now.</u>
Please note: The technical data given here was measured using the IDS Software Suite.

#### Specification

#### Sensor

Shutter Global Shutter / Rolling shutter / Global Start Shutter Sensor characteristic Linear  Readout mode Progressive scan  Pixel Class 1.3 MP  Resolution 1.31 Mpix  Resolution (h x v) 1280 x 1024 Pixel  Appect ratio 5:4  ADC 10 bit  Color depth (camera) 12 bit  Optical sensor class 1/1.8""  Optical Size 6.784 mm x 5.427 mm)  Optical sensor diagonal 8.69 mm (1/1.84")  Pixel size 5.3 µm  Manufacturer e2v  Sensor Model EV76C560ABT  Gain (master/RGB) 4x/-  AOI horizontal same frame rate  AOI vertical increased frame rate  AOI vertical increased frame rate  AOI image width / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning rethod M/C automatic  Binning factor 2  Subsampling horizontal  Subsampling factor -  Subsampling method  Subsampling method  Subsampling method  Subsampling factor -	Sensor type	CMOS Mono
Readout mode Progressive scan  Pixel Class 1.3 MP  Resolution 1.31 Mpix  Resolution (h x v) 1280 x 1024 Pixel  Aspect ratio 5:4  ADC 10 bit  Color depth (camera) 12 bit  Optical sensor class 1/1.8""  Optical Size 6.784 mm x 5.427 mm)  Optical sensor diagonal 8.69 mm (1/1.84")  Pixel size 5.3 µm  Manufacturer e2v  Sensor Model EV76C560ABT  Gain (master/RGB) 4x/-  AOI horizontal same frame rate  AOI vertical increased frame rate  AOI was defined a frame frame rate  AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning wethod M/C automatic  Binning factor 2  Subsampling horizontal  Subsampling method -	Shutter	Global Shutter / Rolling shutter / Global Start Shutter
Pixel Class 1.3 MP  Resolution 1.31 Mpix  Resolution (h x v) 1280 x 1024 Pixel  Aspect ratio 5:4  ADC 10 bit  Color depth (camera) 12 bit  Optical sensor class 1/1.8""  Optical Size 6.784 mm x 5.427 mm)  Optical sensor diagonal 8.69 mm (1/1.84")  Pixel size 5.3 µm  Manufacturer e2v  Sensor Model EV76C560ABT  Gain (master/RGB) 4x/-  AOI horizontal same frame rate  AOI vertical increased frame rate  AOI wertical increased frame rate  AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal  Subsampling method -	Sensor characteristic	Linear
Resolution 1.31 Mpix Resolution (h x v) 1280 x 1024 Pixel Aspect ratio 5:4 ADC 10 bit Color depth (camera) 12 bit Optical sensor class 1/1.8"" Optical Size 6.784 mm x 5.427 mm) Optical sensor diagonal 8.69 mm (1/1.84") Pixel size 5.3 µm Manufacturer e2v Sensor Model EV76C560ABT Gain (master/RGB) 4x/- AOI horizontal same frame rate AOI vertical increased frame rate AOI image width / step width 16 / 4 AOI image height / step width 4 / 2 AOI position grid (horizontal/vertical) 2 / 2 Binning horizontal same frame rate Binning vertical same frame rate Binning method M/C automatic Binning factor 2 Subsampling horizontal Subsampling method -	Readout mode	Progressive scan
Resolution (h x v)  Aspect ratio  5:4  ADC  10 bit  Color depth (camera)  12 bit  Optical sensor class  1/1.8""  Optical Size  6.784 mm x 5.427 mm)  Optical sensor diagonal  8.69 mm (1/1.84")  Pixel size  5.3 µm  Manufacturer  e2v  Sensor Model  EV76C560ABT  Gain (master/RGB)  AV/-  AOI horizontal  AOI vertical  increased frame rate  AOI image width / step width  AOI image height / step width  AOI position grid (horizontal/vertical)  Binning horizontal  Binning method  M/C automatic  Binning factor  2  Subsampling vertical  Subsampling method  -	Pixel Class	1.3 MP
Aspect ratio 5:4  ADC 10 bit  Color depth (camera) 12 bit  Optical sensor class 1/1.8""  Optical Size 6.784 mm x 5.427 mm)  Optical sensor diagonal 8.69 mm (1/1.84")  Pixel size 5.3 µm  Manufacturer e2v  Sensor Model EV76C560ABT  Gain (master/RGB) 4x/-  AOI horizontal same frame rate  AOI vertical increased frame rate  AOI image width / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling wertical -  Subsampling method -	Resolution	1.31 Mpix
ADC Color depth (camera) 12 bit Optical sensor class 1/1.8"" Optical Size 6.784 mm x 5.427 mm) Optical sensor diagonal 8.69 mm (1/1.84") Pixel size 5.3 µm Manufacturer e2v Sensor Model EV76C560ABT Gain (master/RGB) 4x/- AOI horizontal same frame rate AOI vertical increased frame rate AOI image width / step width 4 / 2 AOI position grid (horizontal/vertical) Binning horizontal Same frame rate Binning method M/C automatic Binning factor 2 Subsampling horizontal Subsampling method -	Resolution (h x v)	1280 x 1024 Pixel
Color depth (camera)  Optical sensor class  1/1.8""  Optical Size  6.784 mm x 5.427 mm)  Optical sensor diagonal  8.69 mm (1/1.84")  Pixel size  5.3 µm  Manufacturer  e2v  Sensor Model  EV76C560ABT  Gain (master/RGB)  AV/-  AOI horizontal  same frame rate  AOI vertical  AOI image width / step width  AOI image height / step width  AOI position grid (horizontal/vertical)  Binning horizontal  Binning method  Binning factor  2  Subsampling horizontal  Subsampling wertical  Subsampling method  1/1.8""  1/1.8"  1/1.84"  1/	Aspect ratio	5:4
Optical sensor class 1/1.8"" Optical Size 6.784 mm x 5.427 mm) Optical sensor diagonal 8.69 mm (1/1.84") Pixel size 5.3 µm Manufacturer e2v Sensor Model EV76C560ABT Gain (master/RGB) 4x/- AOI horizontal same frame rate AOI vertical increased frame rate AOI image width / step width 16 / 4 AOI image height / step width 4 / 2 AOI position grid (horizontal/vertical) 2 / 2 Binning horizontal same frame rate Binning vertical same frame rate Binning method M/C automatic Binning factor 2 Subsampling horizontal Subsampling method -	ADC	10 bit
Optical Size 6.784 mm x 5.427 mm) Optical sensor diagonal 8.69 mm (1/1.84") Pixel size 5.3 µm Manufacturer e2v Sensor Model EV76C560ABT Gain (master/RGB) 4x/- AOI horizontal same frame rate AOI vertical increased frame rate AOI image width / step width 16 / 4 AOI image height / step width 4 / 2 AOI position grid (horizontal/vertical) 2 / 2 Binning horizontal same frame rate Binning vertical same frame rate Binning method M/C automatic Binning factor 2 Subsampling horizontal Subsampling wertical - Subsampling method -	Color depth (camera)	12 bit
Optical sensor diagonal  8.69 mm (1/1.84")  Pixel size  5.3 µm  Manufacturer  e2v  Sensor Model  EV76C560ABT  Gain (master/RGB)  AV/-  AOI horizontal  AOI vertical  AOI image width / step width  AOI image height / step width  AOI position grid (horizontal/vertical)  Binning horizontal  Binning wertical  Binning method  M/C automatic  Binning factor  2  Subsampling horizontal  Subsampling method  -  8.69 mm (1/1.84")  8.69 mm (1/1.84")  8.69 mm (1/1.84")  8.70 µm  1.84	Optical sensor class	1/1.8""
Pixel size 5.3 µm  Manufacturer e2v  Sensor Model EV76C560ABT  Gain (master/RGB) 4x/-  AOI horizontal same frame rate  AOI vertical increased frame rate  AOI image width / step width 16 / 4  AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling vertical -  Subsampling method -	Optical Size	6.784 mm x 5.427 mm)
Manufacturer e2v  Sensor Model EV76C560ABT  Gain (master/RGB) 4x/-  AOI horizontal same frame rate  AOI vertical increased frame rate  AOI image width / step width 16 / 4  AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling vertical -  Subsampling method -	Optical sensor diagonal	8.69 mm (1/1.84")
Sensor Model EV76C560ABT  Gain (master/RGB) 4x/-  AOI horizontal same frame rate  AOI vertical increased frame rate  AOI image width / step width 16 / 4  AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling vertical -  Subsampling method -	Pixel size	5.3 μm
Gain (master/RGB) 4x/- AOI horizontal same frame rate AOI vertical increased frame rate AOI image width / step width 16 / 4 AOI image height / step width 4 / 2 AOI position grid (horizontal/vertical) 2 / 2 Binning horizontal same frame rate Binning vertical same frame rate Binning method M/C automatic Binning factor 2 Subsampling horizontal - Subsampling vertical - Subsampling method -	Manufacturer	e2v
AOI horizontal same frame rate  AOI vertical increased frame rate  AOI image width / step width 16 / 4  AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling vertical -  Subsampling method -	Sensor Model	EV76C560ABT
AOI vertical increased frame rate  AOI image width / step width 16 / 4  AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling vertical -  Subsampling method -	Gain (master/RGB)	4x/-
AOI image width / step width AOI image height / step width 4 / 2 AOI position grid (horizontal/vertical) 2 / 2 Binning horizontal Binning vertical Binning method M/C automatic Binning factor 2 Subsampling horizontal - Subsampling vertical - Subsampling method - Subsampling method -	AOI horizontal	same frame rate
AOI image height / step width 4 / 2  AOI position grid (horizontal/vertical) 2 / 2  Binning horizontal same frame rate  Binning vertical same frame rate  Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling vertical -  Subsampling method -	AOI vertical	increased frame rate
AOI position grid (horizontal/vertical)  Binning horizontal  Binning vertical  Binning method  M/C automatic  Binning factor  Subsampling horizontal  Subsampling vertical  Subsampling method  -  Subsampling method  -  Subsampling method  -	AOI image width / step width	16 / 4
Binning horizontal same frame rate Binning vertical same frame rate Binning method M/C automatic Binning factor 2 Subsampling horizontal - Subsampling vertical - Subsampling method -	AOI image height / step width	4/2
Binning vertical same frame rate Binning method M/C automatic Binning factor 2 Subsampling horizontal - Subsampling vertical - Subsampling method -	AOI position grid (horizontal/vertical)	2/2
Binning method M/C automatic  Binning factor 2  Subsampling horizontal -  Subsampling vertical -  Subsampling method -	Binning horizontal	same frame rate
Binning factor 2 Subsampling horizontal - Subsampling vertical - Subsampling method -	Binning vertical	same frame rate
Subsampling horizontal - Subsampling vertical - Subsampling method -	Binning method	M/C automatic
Subsampling vertical - Subsampling method -	Binning factor	2
Subsampling method -	Subsampling horizontal	-
· -	Subsampling vertical	-
Subsampling factor -	Subsampling method	-
Cascampining ractor	Subsampling factor	-



Subject to technical modifications (2024-10-01)



# UI-5240CP-M-GL Rev.2.2 (AB12041)

## Model

Pixel clock range	7 MHz - 86 MHz
Frame rate freerun mode	60 fps
Frame rate trigger (maximum)	59 fps
Exposure time (minimum - maximum)	0.009 ms - 2000 ms
Power consumption	1.8 W - 2.4 W
Image memory	128 MB
Special features	Linescan mode Scaler Sequencer Log mode Sensor hot pixel correction Fine exposure Multi-AOI

#### Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.

Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

#### Connectors

Interface connector	GigE RJ45, screwable
I/O connector	8-pin Hirose connector (HR25-7TR-8PA(73))
Power supply	12 V - 24 V or PoE

# Pin assignment I/O connector

1	Ground (GND)
2	Flash output with optocoupler (-)
3	General Purpose I/O (GPIO) 1
4	Trigger input with optocoupler (-)
5	Flash output with optocoupler (+)
6	General Purpose I/O (GPIO) 2
7	Trigger input with optocoupler (+)
8	Input power supply (VCC) 12-24 V DC



#### Design

5	
Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	29.0 mm x 29.0 mm x 29.0 mm
Mass	51 g

### **Features**

Image Acquisition

Freerun	✓
Software trigger	-
Hardware trigger	✓
Trigger controlled exposure	-
Denoiser	-
Long exposure	-
Line scan	✓
Line scan highspeed	-
Global start	✓

Subject to technical modifications (2024-10-01)



# UI-5240CP-M-GL Rev.2.2 (AB12041)

Flashing	
PWM flashing	-
Auto exposure	-
Auto gain	-
Auto whitebalance	-
Color correction	-
Gamma	-
LUT	-
Mirror/flip	-
Pixel formats	
Region of interest	✓
Decimation (FPGA)	-
Decimation (Sensor)	(2,4)x(2,4)
Binning (FPGA)	-
Chunks	
Sequencer	✓
Firmware update	
1st supported firmware version	4.96.1
	PWM flashing  Auto exposure Auto gain Auto whitebalance Color correction Gamma LUT Mirror/flip  Pixel formats Region of interest Decimation (FPGA) Decimation (Sensor) Binning (FPGA)  Chunks Sequencer Firmware update