

UI-5142SE-C Rev.4 (AB02127)

Not recommended for new designs

The camera model is no longer recommended for new application development.









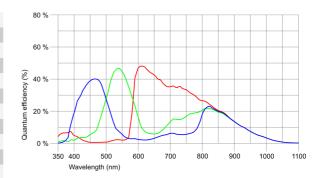


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. <u>Learn about the process here and switch now.</u>
Please note: The technical data given here was measured using the IDS Software Suite.

Specification

Sensor

Shutter Global Shutter Sensor characteristic Linear 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 1/2"" Optical Size 6.144 mm x 4.915 mm Optical sensor diagonal 7.87 mm (1/2.03") Pixel size 4.8 µm Manufacturer Onsemi Sensor Model NOIP1SE1300A-QDI Gain (master/RGB) 4x/4x AOI horizontal increased frame rate AOI vertical increased frame rate AOI was width / step width 120 / 8 AOI image height / step width 2 / 2 AOI position grid (horizontal/vertical) Binning horizontal Binning vertical - Binning method - Binning factor - Subsampling horizontal increased frame rate Subsampling vertical increased frame rate Subsampling method M/C automatic Subsampling method M/C automatic	Sensor type	CMOS Color
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 1/2"" Optical Size 6.144 mm x 4.915 mm Optical sensor diagonal 7.87 mm (1/2.03") Pixel size 4.8 µm Manufacturer Onsemi Sensor Model NOIP1SE1300A-QDI Gain (master/RGB) 4x/4x AOI horizontal increased frame rate AOI vertical increased frame rate AOI image width / step width 120 / 8 AOI mage height / step width 2 / 2 AOI position grid (horizontal/vertical) 8 / 2 Binning horizontal Binning vertical - Binning method - Binning factor - Subsampling horizontal increased frame rate Subsampling vertical increased frame rate Subsampling vertical increased frame rate Subsampling vertical increased frame rate Subsampling method M/C automatic	Shutter	Global Shutter
Pixel Class Resolution Resolution (h x v) 1280 x 1024 Pixel Aspect ratio 5:4 ADC 10 bit Color depth (camera) 12 bit Optical sensor class 1/2"" Optical Size 6.144 mm x 4.915 mm Optical sensor diagonal 7.87 mm (1/2.03") Pixel size 4.8 µm Manufacturer Onsemi Sensor Model NOIP1SE1300A-QDI Gain (master/RGB) 4x/4x AOI horizontal AOI vertical AOI image width / step width AOI image height / step width 2 / 2 AOI position grid (horizontal/vertical) Binning horizontal Binning method - Binning factor Subsampling horizontal increased frame rate Subsampling method M/C automatic	Sensor characteristic	Linear
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Resolution (h x v) Aspect ratio ADC 10 bit Color depth (camera) Optical sensor class 1/2"" Optical Size 6.144 mm x 4.915 mm Optical sensor diagonal 7.87 mm (1/2.03") Pixel size 4.8 µm Manufacturer Onsemi Sensor Model NOIP1SE1300A-QDI Gain (master/RGB) 4x/4x AOI horizontal AOI vertical AOI wertical AOI image width / step width AOI mage height / step width AOI position grid (horizontal/vertical) Binning horizontal Binning vertical Binning factor Subsampling horizontal sincreased frame rate M/C automatic	Pixel Class	1.3 MP
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Binning vertical - Binning method - Binning factor - Subsampling horizontal increased frame rate Subsampling vertical increased frame rate Subsampling method M/C automatic	AOI position grid (horizontal/vertical)	8/2
Binning method - Binning factor - Subsampling horizontal increased frame rate Subsampling vertical increased frame rate Subsampling method M/C automatic	Binning horizontal	-
Binning factor - Subsampling horizontal increased frame rate Subsampling vertical increased frame rate Subsampling method M/C automatic	Binning vertical	-
Subsampling horizontal increased frame rate Subsampling vertical increased frame rate Subsampling method M/C automatic	Binning method	-
Subsampling vertical increased frame rate Subsampling method M/C automatic	Binning factor	-
Subsampling method M/C automatic	Subsampling horizontal	increased frame rate
• •	Subsampling vertical	increased frame rate
Subsampling factor 2	Subsampling method	M/C automatic
	Subsampling factor	2



Subject to technical modifications (2024-04-26)



UI-5142SE-C Rev.4 (AB02127)

Model

Pixel clock range	120 MHz - 152 MHz
Frame rate freerun mode	88
Frame rate trigger (continuous)	88
Frame rate trigger (maximum)	88
Exposure time (minimum - maximum)	0.069 ms - 434 ms
Long exposure (maximum)	5000 ms
Power consumption	1.7 W - 2.8 W
Image memory	128 MB
Special features	IDS line scan mode, Overlap trigger, Sensor source gain, Multi-AOI

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing. For PCB versions, refer to the separate hints in the respective documentation.

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

Connectors

Interface connector	GigE RJ45
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



Camera rear view

Design

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Lens Mount	-
IP code	-
Dimensions H/W/L	31.5 mm x 40.0 mm x 30.0 mm
Mass	35 g

Subject to technical modifications (2024-04-26)