iDS

UI-1491LE-M-HQ (AB.0010.1.52300.24)

In series

The model is in series and available for the long term



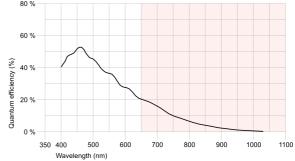


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. Learn about the process here and switch now. Please note: The technical data given here was measured using the IDS Software Suite.

Specification

Sensor

Sensor		
Sensor type	CMOS Mono	80 %
Shutter	Rolling shutter	
Sensor characteristic	Linear	60 %
Readout mode	Progressive scan	
Pixel Class	10 MP	ి 40 % స్
Resolution	10.55 Mpix	% 04 % 04 % % 04 % % 05 % % 05 % %
Resolution (h x v)	3840 x 2748 Pixel	₩ E 20 %
Aspect ratio	4:3	nantu
ADC	12 bit	Ø 0%
Color depth (camera)	8 bit	
Optical sensor class	1/2""	
Optical Size	6.413 mm x 4.589 mm	
Optical sensor diagonal	7.89 mm (1/2.03")	
Pixel size	1.67 µm	
Manufacturer	Onsemi	
Sensor Model	MT9J003STM	
Gain (master/RGB)	8.5x/-	
AOI horizontal	increased frame rate	
AOI vertical	increased frame rate	
AOI image width / step width	448 / 4	
AOI image height / step width	4 / 2	
AOI position grid (horizontal/vertical)	4/2	
Binning horizontal	increased frame rate	
Binning vertical	increased frame rate	
Binning method	Color	
Binning factor	2	
Subsampling horizontal	increased frame rate	
Subsampling vertical	increased frame rate	
Subsampling method	Color	
Subsampling factor	2, 4	



Subject to technical modifications (2024-04-26)

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Model

Pixel clock range	5 MHz - 36 MHz
Frame rate freerun mode	3.2 fps
Frame rate trigger (maximum)	3.2 fps
Exposure time (minimum - maximum)	0.340 ms - 14582 ms
Power consumption	0.5 W - 1.3 W

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.

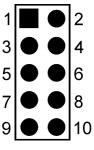
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB 2.0 mini-B
I/O connector	10-pin plated-through holes
Power supply	USB cable

Pin assignment I/O connector

1	USB Power supply (VCC) 5 V
2	USB Ground (GND)
3	Trigger input without optocoupler (+)
4	Flash output without optocoupler (+)
5	Power supply (internal voltage transformer), 3.3 V or 3.0 V (sensor-dependent)
6	USB Ground (GND)
7	General Purpose I/O (GPIO) 1
8	General Purpose I/O (GPIO) 2
9	I2C bus clock signal
10	I2C bus data signal



Camera rear view

Design

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Lens Mount	S-Mount
IP code	-
Dimensions H/W/L	36.0 mm x 36.0 mm x 20.2 mm
Mass	16 g

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