

# UI-1641LE-C-HQ (AB.0010.1.28100.00)













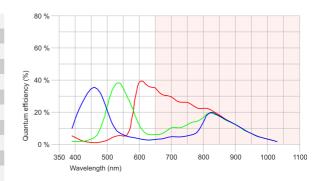


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. <u>Learn about the process here and switch now.</u>
Please note: The technical data given here was measured using the IDS Software Suite.

# Specification

#### Sensor

Sensor type	CMOS Color
Shutter	Rolling 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	1/3""
Optical Size	4.608 mm x 3.686 mm
Optical sensor diagonal	5.9 mm (1/2.71")
Pixel size	3.6 µm
Manufacturer	Onsemi
Sensor Model	MT9M131STC
Gain (master/RGB)	4.3x/3.1x
AOI horizontal	increased frame rate
AOI vertical	increased frame rate
AOI image width / step width	32 / 4
AOI image height / step width	4/2
AOI position grid (horizontal/vertical)	4/2
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Subsampling horizontal	increased frame rate
Subsampling vertical	increased frame rate
Subsampling method	Color
Subsampling factor	2, 4



Subject to technical modifications (2024-04-24)



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### Model

Pixel clock range	5 MHz - 40 MHz
Frame rate freerun mode	25
Frame rate trigger (maximum)	24
Exposure time (minimum - maximum)	0.037 ms - 10122 ms
Power consumption	0.3 W - 0.8 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.

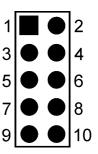
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

### 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

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