

Discontinued
The model has been discontinued.

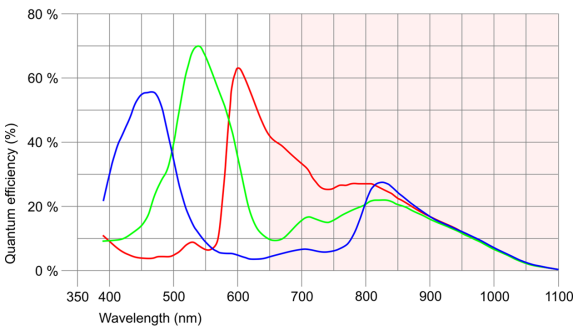


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. [Learn about the process here](#) and [switch now](#). Please note: The technical data given here was measured using the IDS Software Suite.

Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	18 MP
Resolution	18.10 Mpix
Resolution (h x v)	4912 x 3684 Pixel
Aspect ratio	4:3
ADC	10 bit
Color depth (camera)	12 bit
Optical sensor class	1/2.3"
Optical Size	6.140 mm x 4.605 mm
Optical sensor diagonal	7.68 mm (1/2.08")
Pixel size	1.25 µm
Manufacturer	Onsemi
Sensor Model	AR1820HSSC00SHEA0
Gain (master/RGB)	16x/4x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	320 / 4
AOI image height / step width	240 / 2
AOI position grid (horizontal/vertical)	8 / 2
Binning horizontal	same frame rate
Binning vertical	increased frame rate
Binning method	Color
Binning factor	2 / 4
Subsampling horizontal	same frame rate
Subsampling vertical	increased frame rate
Subsampling method	Color
Subsampling factor	2, 4



Subject to technical modifications (2024-04-26)

Model

Pixel clock range	96 MHz - 432 MHz
Frame rate freerun mode	20
Frame rate trigger (maximum)	20
Exposure time (minimum - maximum)	0.013 ms - 999 ms
Power consumption	0.9 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.

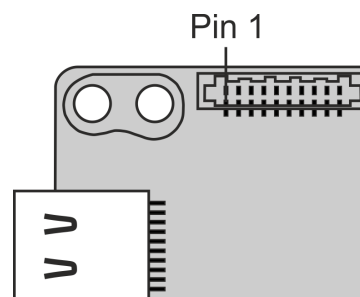
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB Type-C
I/O connector	10-pin Molex connector (IllumiMate)
Power supply	USB cable

Pin assignment I/O connector

1	Voltage output (USB Power Delivery), 5-15 V
2	Ground (GND)
3	General Purpose I/O (GPIO) 2, 3.3 V
4	General Purpose I/O (GPIO) 1, 3.3 V
5	TWI (Two Wire Interface) clock signal
6	TWI (Two Wire Interface) data signal
7	Trigger input without optocoupler 3.3 V
8	Flash output without optocoupler 3.3 V
9	Ground (GND)
10	Voltage output 3.3 V



Camera rear view

Design

Lens Mount	S-Mount
IP code	-
Dimensions H/W/L	36.0 mm x 36.0 mm x 19.9 mm
Mass	21 g