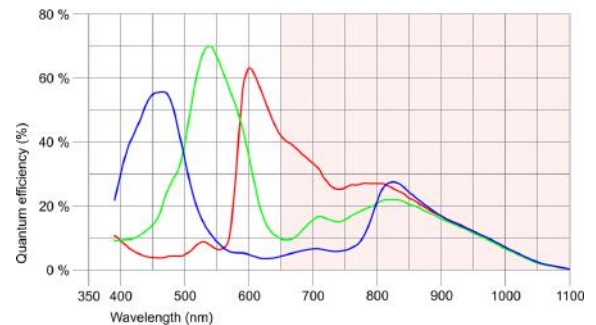




Specification

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	ON Semiconductor
Sensor Model	AR1820HSSC00SHEA0
Gain (master/RGB)	16x/4x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	320 / 8
AOI image height / step width	240 / 2
AOI position grid (horizontal/vertical)	8 / 2
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	Color
Binning factor	2 / 4
Subsampling horizontal	increased frame rate
Subsampling vertical	increased frame rate
Subsampling method	Color
Subsampling factor	2, 4



Model

Pixel clock range	96 MHz - 432 MHz
Frame rate freerun mode	21
Frame rate trigger (maximum)	21
Exposure time (minimum - maximum)	0.013 ms - 998 ms
Long exposure (maximum)	998 ms
Power consumption	1.4 W - 2.7 W
Image memory	128 MB

Ambient conditions

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

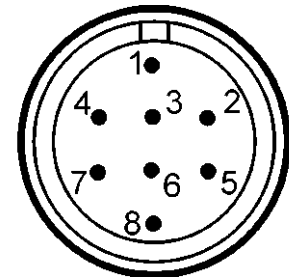
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB 3.0 micro-B, screwable
I/O connector	8-pin Hirose connector (HR25-7TR-8PA(73))
Power supply	USB cable

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	Output supply voltage, 5 V (100 mA)



Camera rear view

Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	29.0 mm x 29.0 mm x 29.0 mm
Mass	52 g