



Specification

Sensor

Sensor type	CMOS Mono
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	20 MP
Resolution	20.44 Mpix
Resolution (h x v)	5536 x 3692 Pixel
Aspect ratio	3:2
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1"
Optical Size	13.286 mm x 8.861 mm
Optical sensor diagonal	15.97 mm (1/1")
Pixel size	2.4 µm
Manufacturer	Sony
Sensor Model	IMX183CLK-J
Gain (master/RGB)	-/-
AOI horizontal	same frame rate
AOI vertical	same frame rate
AOI image width / step width	256 / 16
AOI image height / step width	1 / 1
AOI position grid (horizontal/vertical)	16 / 1
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Subsampling horizontal	same frame rate
Subsampling vertical	same frame rate
Subsampling method	M/C automatic
Subsampling factor	2, 4, 8

Subject to technical modifications (2019-11-20)

Model

Pixel clock range	MHz - MHz
Frame rate freerun mode	19
Frame rate trigger (continuous)	10
Frame rate trigger (maximum)	10
Exposure time (minimum - maximum)	0.053 ms - 814 ms
Power consumption	1.5 W - 3 W
Image memory	128 MB
Special features	Sensor source gain

Ambient conditions

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

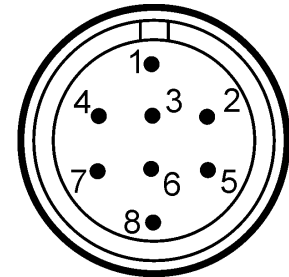
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

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	49 g