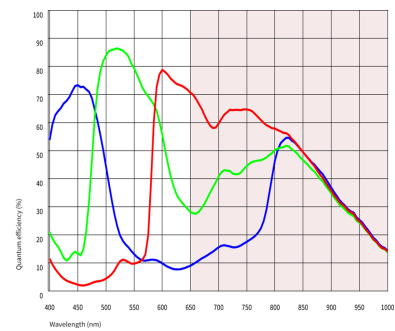


In series
The model is in series and available for the long term.



Specification

Sensor	
Sensor type	CMOS Color
Shutter	Rolling shutter
Sensor characteristic	Linear
Pixel Class	8 MP
Resolution	8.29 Mpix
Resolution (h x v)	3840 x 2160 Pixel
Aspect ratio	16:9
ADC	12 bit
Color depth (camera)	8 bit
Optical sensor class	1/1.8"
Optical Size	7.680 mm x 4.320 mm
Optical sensor diagonal	8.81 mm 1/1.8"
Pixel size	2 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX678-AAQR1-C
Gain (master/RGB)	-/-
AOI horizontal	-
AOI vertical	-
AOI image width / step width	- / -
AOI image height / step width	- / -
AOI position grid (horizontal/vertical)	- / -
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Decimation (subsampling) horizontal	-
Decimation (subsampling) vertical	-
Decimation (subsampling) method	-



IDS NXT malibu RS18083C-HQ (1010519)

Model

Frame rate freerun mode	27 fps
Frame rate trigger (continuous)	10 fps
Frame rate trigger (maximum)	10 fps
Exposure time (minimum - maximum)	0.031 ms - 33.333 ms
Power consumption	6 W - 7 W
Image memory	72 MB

Ambient conditions

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

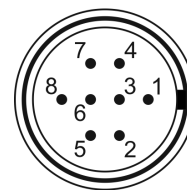
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	GigE RJ45, screwable
I/O connector	8-pin Hirose connector (HR25-7TR-8PA(73))
Power supply	12 V - 24 V or PoE+

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	Input power supply (VCC) 12-24 V DC



Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	34.0 mm x 44.0 mm x 73.0 mm
Mass	161 g
Housing material	Aluminum

Features

List of on-camera image pre-processing features.

All features of the table are available via our IDS peak software for image pre-processing on the host computer (sensor model dependent).

Image Acquisition

Freerun	✓
Software trigger	✓
Hardware trigger	-
Trigger controlled exposure	-
Denoiser	-
Long exposure	-
Line scan	-
Global start	-

Flashing

Flashing	-
PWM flashing	-

Subject to technical modifications (2026-09-09)

IDS NXT malibu RS18083C-HQ (1010519)

Image Adjustments

Auto exposure	✓
Auto gain	✓
Auto whitebalance	✓
Color correction	-
Gamma	-
LUT	-
Mirror/flip	X/Y

On-board Image Processing

Pixel formats	BayerGR8
Region of interest	-
Decimation (FPGA)	-
Decimation (Sensor)	-
Binning (FPGA)	-

Others

Chunks	-
Sequencer	-
Firmware update	✓
1st supported firmware version	4.1