

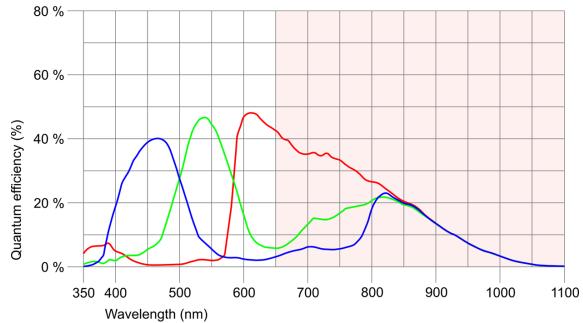
■ Discontinued  
The model has been discontinued.



## Specification

### Sensor

Sensor type	CMOS Color
Shutter	Global Shutter
Sensor characteristic	Linear
Readout mode	-
Pixel Class	0.5 MP
Resolution	0.48 Mpix
Resolution (h x v)	800 x 600 Pixel
Aspect ratio	4:3
ADC	10 bit
Color depth (camera)	12 bit
Optical sensor class	1/3.6""
Optical Size	3.840 mm x 2.880 mm
Optical sensor diagonal	4.8 mm 1/3.6"
Pixel size	4.8 $\mu$ m
Manufacturer	Onsemi
Sensor Model	NOIP1SE0500A-QDI
Gain (master/RGB)	4x/4x
AOI horizontal	increased frame rate
AOI vertical	increased frame rate
AOI image width / step width	120 / 8
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	8 / 2
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Decimation (subsampling) horizontal	increased frame rate
Decimation (subsampling) vertical	increased frame rate
Decimation (subsampling) method	M/C automatic
Decimation (subsampling) factor	2



## Model

Pixel clock range	120 MHz - 152 MHz
Frame rate freerun mode	205 fps
Frame rate trigger (continuous)	205 fps
Frame rate trigger (maximum)	205 fps
Exposure time (minimum - maximum)	0.058 ms - 303 ms
Long exposure (maximum)	5000 ms
Power consumption	1.7 W - 2.7 W
Image memory	128 MB
Special features	IDS line scan mode Overlap trigger Sensor source gain Multi-AOI

## Ambient conditions

For PCB versions, refer to the separate hints in the respective documentation.

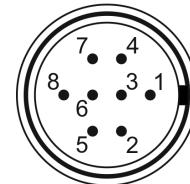
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

## Connectors

Interface connector	GigE RJ45
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	-
Dimensions H/W/L	34.0 mm x 44.0 mm x 35.0 mm
Mass	62 g
Housing material	-

## 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	✓

Subject to technical modifications (2026-01-19)

Flashing	Flashing	-
	PWM flashing	-
Image Adjustments	Auto exposure	-
	Auto gain	-
	Auto whitebalance	-
	Color correction	-
	Gamma	-
	LUT	-
	Mirror/flip	-
On-board Image Processing	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	-
	Binning (FPGA)	-
Others	Chunks	-
	Sequencer	-
	Firmware update	-
	1st supported firmware version	4.90