

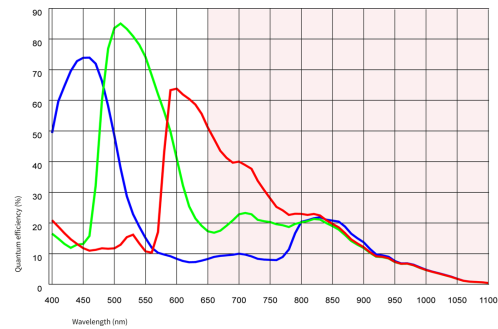
IDS NXT oslo RO25050C-HQ (1011682)

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	5 MP
Resolution	5.04 Mpix
Resolution (h x v)	2592 x 1944 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	8 bit
Optical sensor class	1/2.5"
Optical Size	5.702 mm x 4.277 mm
Optical sensor diagonal	7.13 mm 1/2.5"
Pixel size	2.2 µm
CRA (Chief Ray Angle)	9 °
Manufacturer	Onsemi
Sensor Model	AR0521SR2C09SURA0
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	-



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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	4 W - 6.7 W
Image memory	-

Ambient conditions

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

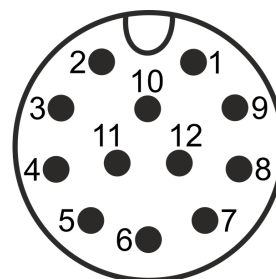
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	0 % - 100 %

Connectors

Interface connector	GigE M12, screwable
I/O connector	12-pin M12 connector (Attend 216A-12MSR)
Power supply	12 V - 24 V or PoE

Pin assignment I/O connector

1	Power supply (VCC) 12-24 V
2	Power supply, ground
3	Input 2, with optocoupler (+)
4	Input 1, with optocoupler (+)
5	Input 1, with optocoupler (-)
6	Output 1, with optocoupler (-)
7	Output 1, with optocoupler (+)
8	Output 2, with optocoupler (+)
9	General Purpose I/O (GPIO) 1
10	General Purpose I/O (GPIO) 2
11	Input 2, with optocoupler (-)
12	Output 2, with optocoupler (-)



Design

Lens Mount	C-Mount
IP code	IP66, IP67, IP69, IPx9K
Dimensions H/W/L	41.0 mm x 53.0 mm x 75.0 mm
Mass	285 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	-

Subject to technical modifications (2026-09-09)

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Flashing	Flashing	-
	PWM flashing	-
Image Adjustments	Auto exposure	✓
	Auto gain	✓
	Auto whitebalance	✓
	Color correction	-
	Gamma	-
	LUT	-
	Mirror/flip	X/Y
On-board Image Processing	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	
	Binning (FPGA)	-
Others	Chunks	-
	Sequencer	-
	Firmware update	✓
	1st supported firmware version	4.3.0