IDS NXT rio Rev.1.2 GS29016M-GL (1009141)

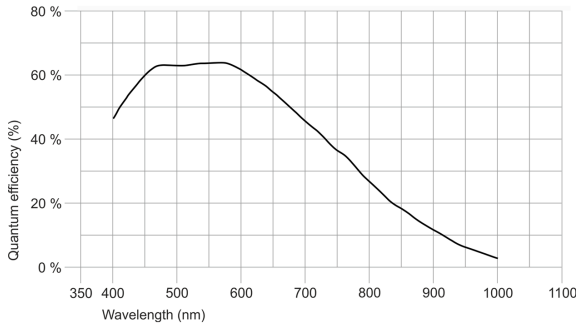
Discontinued
The model has been discontinued.



Specification

Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter
Sensor characteristic	Linear
Pixel Class	1.6 MP
Resolution	1.58 Mpix
Resolution (h x v)	1456 x 1088 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	8 bit
Optical sensor class	1/2.9"
Optical Size	4.968 mm x 3.726 mm
Optical sensor diagonal	6.21 mm 1/2.9"
Pixel size	3.45 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX273LLR-C
Gain (master/RGB)	24x/4x
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	34 fps
Frame rate trigger (continuous)	41 fps
Frame rate trigger (maximum)	41 fps
Exposure time (minimum - maximum)	0.025 ms - 2000 ms
Power consumption	5.4 W - 10 W
Image memory	128 MB

Ambient conditions

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

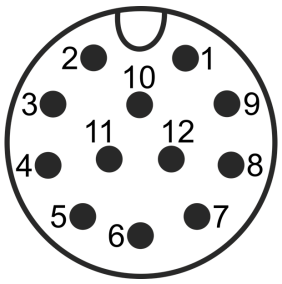
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	GigE RJ45, screwable
I/O connector	12-pin M12 connector (Attend 216A-12MSR)
Power supply	12 V - 24 V or PoE

Pin assignment I/O connector

1	Power supply 12-24 V DC (VBUS)
2	Reference level (ground) for power supply and RS-232 (VBUS GND)
3	Trigger input with optocoupler (Opto IN 0)
4	Input 1 with optocoupler (Opto IN 1)
5	Common reference level for all Opto IN (Opto IN COM)
6	Common reference level for all Opto OUT (Opto OUT COM)
7	Output 1 with optocoupler (Opto OUT 1)
8	Output 2 with optocoupler (Opto OUT 2)
9	Serial interface (RS232 RxD)
10	Serial interface (RS232 TxD)
11	Input 2 with optocoupler (Opto IN 2)
12	Flash output with optocoupler (Opto OUT 0)



Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	34.0 mm x 44.0 mm x 73.0 mm
Mass	169.5 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	-

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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)	(2,4)x(2,4)
	Binning (FPGA)	✓
Others	Chunks	-
	Sequencer	-
	Firmware update	-
	1st supported firmware version	3.0

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