Nion10.67.G1.AF0130.72 (1013258)

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



Specification

Model

Frame rate freerun mode	30 fps
Frame rate trigger (continuous)	30 fps
Frame rate trigger (maximum)	30 fps
Exposure time (minimum - maximum)	0.0038 ms - 1.00203 ms
Power consumption	3.3 W - 16.4 W
Working distance	0.3 m - 7.5 m
Laser wave length	940 nm
Image memory	-
Special features	Overlap trigger Sensor source gain

Design

IP code	IP66, IP67
Dimensions H/W/L	60.0 mm x 60.0 mm x 75.0 mm
Mass	370 g
Laser class	1

Integrated optics

Angle of view	Horizontal: 71° Vertical: 57° Diagonal: 91°

Operating modes

Mode	Unambiguous range	Modulation frequence	Exposure time (maximum)	2D resolution	Accuracy
Uar750QuadVga	0.75 m	200 MHz	1002.03 µs	1280x960 Pixel	±5.0 mm ± 0.25 % of depth
Uar1500QuadVga	1.5 m	100 MHz	1002.03 µs	1280x960 Pixel	±10.0 mm ± 0.5 % of depth
Uar2000QuadVga	2 m	75 MHz	1002.03 µs	1280x960 Pixel	±15.0 mm ± 1 % of depth
Uar3000QuadVga	3 m	50 MHz	1002.03 µs	1280x960 Pixel	±15.0 mm ± 1 % of depth
Uar6000Vga	6 m	175 MHz, 200 MHz	499.11 µs	640x480 Pixel	±5.0 mm ± 0.25 % of depth
Uar7500Vga	7.5 m	100 MHz, 120 MHz	499.11 µs	640x480 Pixel	±10.0 mm ± 0.5 % of depth

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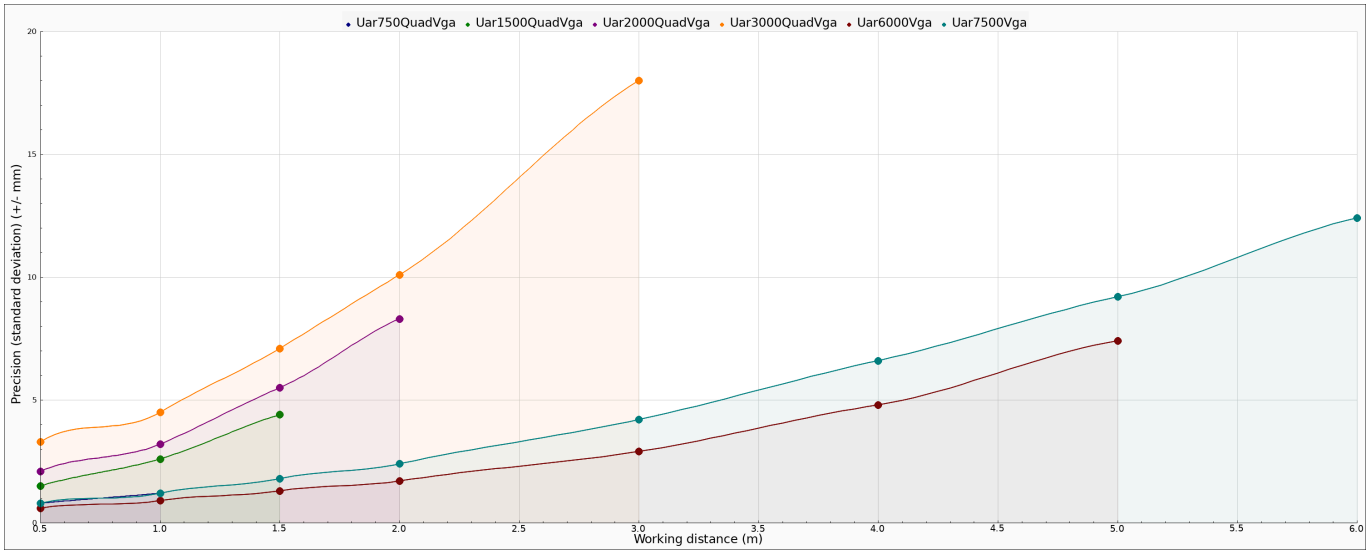
Precision

Mode	0.5 m	1 m	1.5 m	2 m	3 m	4 m	5 m	6 m
Uar750QuadVga	0.8 mm	1.2 mm	-	-	-	-	-	-
Uar1500QuadVga	1.5 mm	2.6 mm	4.4 mm	-	-	-	-	-
Uar2000QuadVga	2.1 mm	3.2 mm	5.5 mm	8.3 mm	-	-	-	-
Uar3000QuadVga	3.3 mm	4.5 mm	7.1 mm	10.1 mm	18.0 mm	-	-	-
Uar6000Vga	0.6 mm	0.9 mm	1.3 mm	1.7 mm	2.9 mm	4.8 mm	7.4 mm	-
Uar7500Vga	0.8 mm	1.2 mm	1.8 mm	2.4 mm	4.2 mm	6.6 mm	9.2 mm	12.4 mm



Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter
Pixel Class	1.2 MP
Resolution	1.23 Mpix
Resolution (h x v)	1280 x 960 Pixel
Manufacturer	Onsemi
Sensor Model	AF0130CSSM30SMKA1
Gain (master/RGB)	8x/-
AOI horizontal	same frame rate
AOI vertical	same frame rate
AOI image width / step width	320 / 4
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	same frame rate
Binning vertical	same frame rate
Binning method	
Binning factor	4x4
Decimation (subsampling) horizontal	-
Decimation (subsampling) vertical	-
Decimation (subsampling) method	-
Decimation (subsampling) factor	-

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Ambient conditions

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

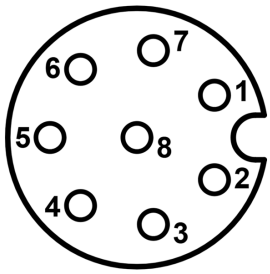
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during operation	0 °C - 35 °C / 32 °F - 95 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	0 % - 100 %

Connectors

Interface connector	GigE M12, screwable
I/O connector	8-pin M12 connector
Power supply	12 V - 24 V or PoE++

Pin assignment I/O connector

1	(Trigger) input (+) with optocoupler - Line0
2	(Trigger) input (-) with optocoupler - Line0
3	(Flash) input (-) with optocoupler - Line1
4	(Flash) input (+) with optocoupler - Line1
5	Power supply, ground
6	Power supply (VCC) 12-24 V
7	General Purpose I/O (GPIO) 1, 3.3 V - Line 2
8	General Purpose I/O (GPIO) 2, 3.3 V - Line 3



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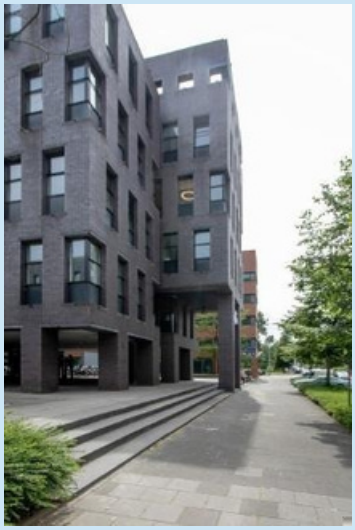
Christian Crompvoets



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