

## Technical specifications

<b>Product type</b>	Digital high speed camera
<b>Image Sensor</b>	CMOS APS Sensor
<b>Image Sensor</b>	Monochrome or color (with Bayer pattern)
<b>Pixel size</b>	14 µm
<b>Dynamic range</b>	8 bit
<b>Sensitivity</b>	ISO 3200 (monochrome), ISO 1600 (color)
<b>Image Resolution</b>	640 x 480 pixels 320 x 240 pixels (reduced)
<b>Image size</b>	640 x 480: 8.96 x 6.72 mm (approx. 2/3" image size) 320 x 240: 4.98 x 3.36 mm (approx. 1/2" image size)
<b>Frame rate</b>	1,000 fps @ 640 x 480 or 320 x 240 pixels
<b>Max. frame rate</b>	1,000 fps
<b>ROI</b>	640 x 480 or 320 x 240 pixels, centered
<b>Shutter type</b>	Global electronic shutter
<b>Shutter exposure times</b>	4 µsec to 1/frame rate

<b>Image memory</b>	Built-in, DRAM
<b>Standard capacity</b>	1.3 GB
<b>Optional</b>	2.6, 5.2 GB
<b>Memory upgrade</b>	Possible, factory upgrade
<b>Sequence length</b>	4.3 secs @ 640 x 480/1000 fps (1.3 GB image memory) 8.6 secs @ 640 x 480/1000 fps (2.6 GB image memory) 17.2 secs @ 640 x 480/1000 fps (5.2 GB image memory) Sequence length can be extended by reducing the image resolution resp. frame rate

<b>Data Interface</b>	Gigabit Ethernet
<b>Video Interface</b>	nA
<b>Memory Interface</b>	nA
<b>Event Marker</b>	1 (TTL, input)

<b>Power supply</b>	12 VDC (9...16 VDC)
<b>Power consumption</b>	20 W
<b>Battery</b>	Built-in, rechargeable NiMH battery allowing 30 minutes camera operation

### Options

The S-PRI F1 is a pre-configured model with a well balanced feature set with an emphasis on an economic price. Options and extensions are not available for this model.

Please refer to the product leaflet / technical specs of the S-PRI, a camera model for which a range of options and extensions are available

### Certifications

<b>CE</b>	In compliance with relevant standards
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### Environmental conditions

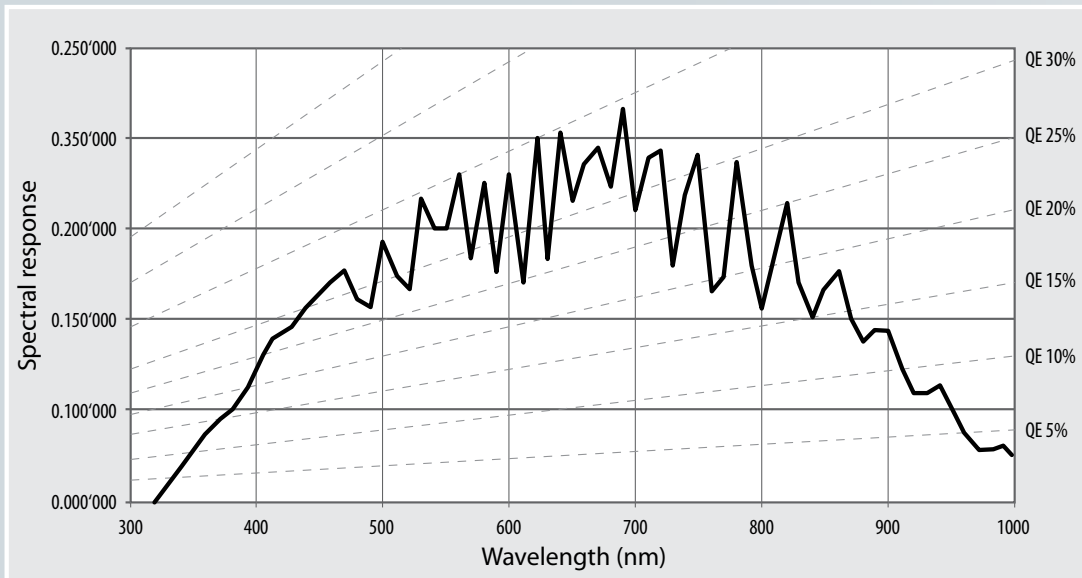
<b>Operating temperature</b>	0 ... +45 °C (32 ... 113 °F)
<b>Storage temperature</b>	-40 ... +70 °C (-40 ... 158 °F)
<b>Operating humidity</b>	max. 80 %, non condensing, at 45 °C (113 °F) for 8 hours
<b>Storage humidity</b>	max. 40 %, non condensing, at 70 °C (158 °F) for 48 hours

### Control PC – minimum requirements

<b>CPU</b>	Pentium Dual Core, 2 GHz
<b>DRAM</b>	2 GB
<b>HDD</b>	60 GB
<b>Interfaces</b>	GigE
<b>OS</b>	MS Windows 2000, XP PRO, VISTA, Windows7

The control PC for an AOS high speed camera has to meet or exceed these minimum requirements for a reliable, convenient camera performance. PC's with lower specifications may result in a camera performance below the indicated ones.

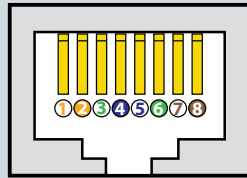
## Spectral response



## Connectors

### Data Connector

- 1 BI\_DA+
- 2 BI\_DA-
- 3 BI\_DB+
- 4 BI\_DC+
- 5 BI\_DC-
- 6 BI\_DB-
- 7 BI\_DD+
- 8 BI\_DD-



Connector type:

RJ45

### I/O Connector

- 1 GND (-)
- 2 V In (In)
- 3 Remote On (In)
- 4 -
- 5 -
- 6 Set-to-Rec (In)
- 7 Trigger (In)
- 8 Strobe (Out)
- 9 Armed (Out)
- 10 Triggered (Out)
- 11 Event Marker 1
- 12 -
- 13 -
- 14 -



Connector type:

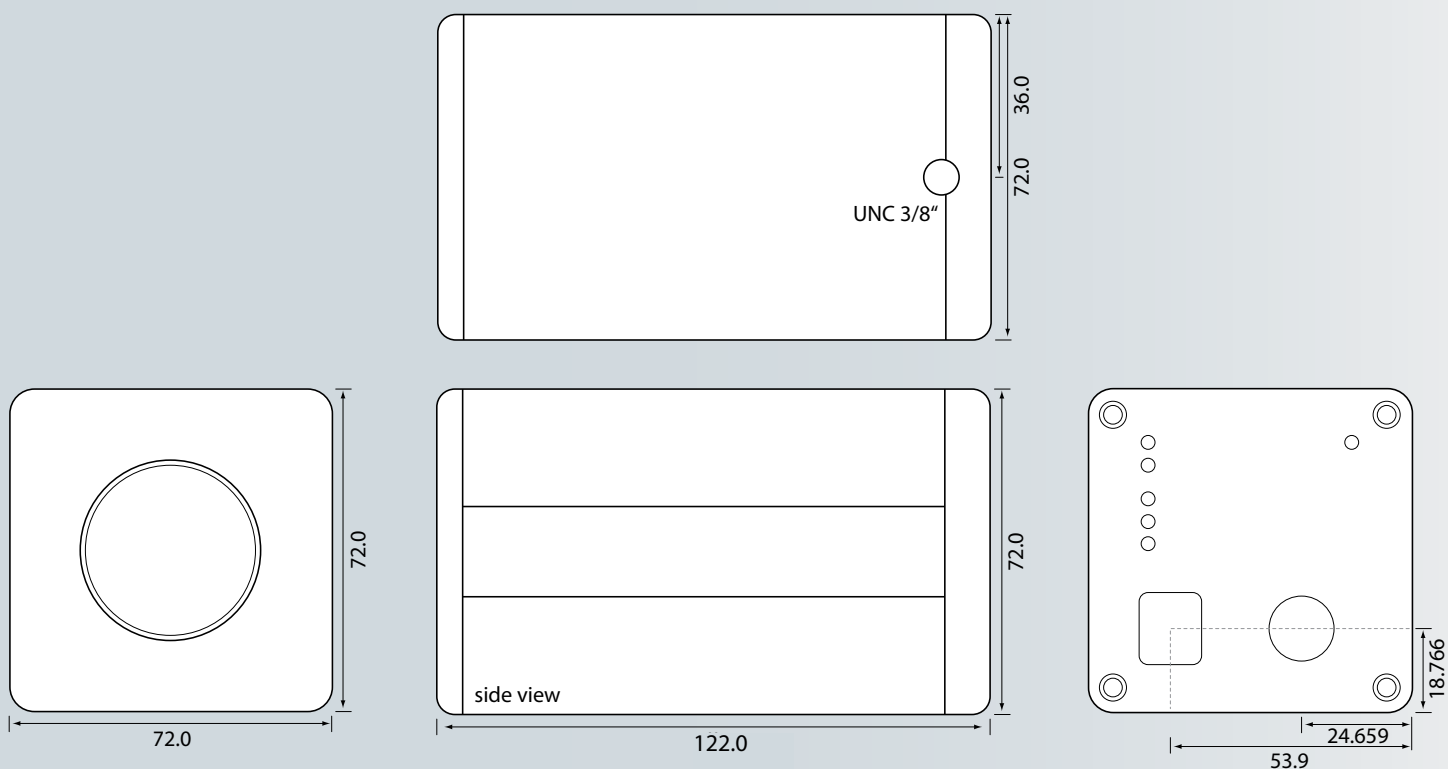
LEMO Type: FGG.2B.314.CLAD82Z

ODU Type: S22LOC-P14MFG0-8200

## Dimensions / weight / mechanics

<b>Dimension (w/o options)</b>	72 x 72 x 122 mm (w/o lens and extensions)
<b>Weight</b>	900 gr (w/o lens and extensions)
<b>Lens mount</b>	c-mount (3/8"), adjustable backfocus
<b>Camera mount</b>	Standard UMC 3/8" thread with 1/4" brass insert M6 threads for camera plate

## Dimension / Mounting



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Specifications are subject to change without prior notice – v10.2009