AOS
Technologies AG

S-PRI F2 High Speed Camera

NEW:
- **up to 700fps at HDTV (700fps @ 1280 x 720)**
- **optional 24...36V supply voltage**

S-PRI F2 – the compact, light sensitive high speed camera
for industrial and research applications in a very competitive price/performance package

Applications

The S-PRI F2 is particularly suited for all applications where a compact and portable yet robust camera is essential:

• Industrial applications such as the installation and setting up of machinery and assembly lines as well as the subsequent trouble-shooting.

• Research applications in mechanical, electrical and process engineering, material stress testing, medical research, sports analysis, etc.

Why the S-PRI F2?

• Image resolution and performance – 1280 x 1024 pixels up to 500fps - provides you with excellent image quality and a frame rate to capture most industrial processes

• Robust design – extruded aluminium housing for exceptional protection against rough industrial ambient conditions (shocks, vibration, dust, electromagnetic noise), making the camera extra reliable and offers an extended product life time. Heavy duty industrial connectors.

• Simple to use – the camera control software is easy to use, even for novices and occasional users; operator training is not necessary – yet provides full control of the camera settings and functions.

• Autonomous operation – the built-in battery allows you to use the camera without external power cables and power supplies.

Unique features

• **Compact** - 'all-in-one camera' with built-in image memory and battery.

• **High image resolution**- see finest details with the camera's full image resolution of 1280 x 1024 pixels, or record movies and video clips in the popular HDTV (720p) format.

• **Standard data interface** – the S-PRI F2 connects via standard Gigabit Ethernet ('GigE') data interface to the control PC. No need for dedicated or special camera interfaces and -cables.

• **High Sensitivity** – the S-PRI F2 offers a high light sensitivity, well suited for mobile applications. In many applications and settings, the camera delivers well-lit images without extra illumination, while in others only minimal extra light is necessary.

• **Powerful yet simple to operate control software** - the S-PRI F1 includes the 'AIS - AOS Imaging Studio' control software. Despite many features and functions, the AIS is simple to operate, even for novices.

Technical key specifications

Image Sensor	Progressive CMOS, 1280 x 1024 pixels, mono or color
Sensor size (@ full resolution)	17.92 x 14.33 mm, 14 µm pixel size
Light sensitivity	ISO 3200 (monochrome), ISO 1600 (color)
Dynamic range	8 bit
Frame rate at full resolution	up to 500 fps @ 1280 x 1024 pixels
Typical fps/resolution settings	1280 x 1024 @ up to 500fps 1280 x 720 @ up to 700fps
Max. frame rate	700 fps
Shutter type	Global electronic shutter
Shutter exposure times	4 µsec to 1/frame rate
Image memory	Built-in DRAM, circular buffer
Sequence length (typical)	2 sec @ 1280 x 1024 / 500fps (1.3 GB memory) 4 sec @ 1280 x 1024 / 500fps (2.6 GB memory) 8.1 sec @ 1280 x 1024 / 500fps (5.2 GB memory) 16.2 sec @ 1280 x 1024 / 500fps (10.4 GB memory) 2 sec @ 1280 x 720 / 700fps (1.3 GB memory) 4.1 sec @ 1280 x 720 / 700fps (2.6 GB memory) 8.2 sec @ 1280 x 720 / 700fps (5.2 GB memory) 16.5 sec @ 1280 x 720 / 700fps (10.4 GB memory)
Data Interface	Gigabit Ethernet (1'000 Mb/s) RJ45, other connectors on request
Frame synchronisation **Multi-camera operation**	n/a n/a
Power supply	12 VDC (9...16VDC), other voltage ratings available on request
24 V Interface (optional)	Voltage range (24 – 36 V DC)
Power consumption	15 W (w/o data link), 18 W (with data link)
Battery	Built-in, rechargeable NiMH battery allowing up to 30 minutes camera operation.
Temp range, storage **Temp ramge, operation**	-40…+70 ºC (-40…+158 ºF) 0 … +45 ºC (32 …113 ºF)
Size, weight (standard model)	72 x 72 x 122 mm, 900 gr
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 Status 1 (In) 12 - 13 - 14 -	**LEMO** Type: FGG.2B.314.CLAD82Z **ODU** Type: S22LOC-P14MFG0-8200
CE	In compliance with relevant standards

Mechanical engineering on an eccentric press

Industrial troubleshooting on a bottling line

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