



PRODUCT LEAFLET

TECHNICAL SPECS

APPLICATION NOTE

S-VIT F1 – the ruggedized, compact high speed camera for automotive safety testing and harsh industrial as well as research applications. More light sensitive than ever.

Applications

The S-VIT F1 is particularly suited for all applications where a compact and portable yet robust camera is essential:

- Automotive safety testing – on-board full size crash vehicle or sled body structures where the camera is fitted into tight areas like door panels or the pedal area
- Industrial or military applications with Hi-G shocks and limited space – like eccentric presses and similar devices

Why the S-VIT F1?

- Perfectly balanced performance – 1'000 fps @ 640 x 480 pixels provides you with a frame rate and image resolution suitable for a range of automotive test applications
- Robust design – designed for many years of industrial handling and harsh environments (milled aluminum housing with heavy duty 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. Ideal for troubleshooting appliances on the factory floor

Unique features

High Sensitivity – the S-VIT F1 offers a light sensitivity stages higher than that of previous cameras. In many applications and settings, the camera delivers well-lit images without extra illumination even in difficult setups like pedal area testing or to capture suspension details.

High light sensitivity also allows you to get crisp images as motion blur of fast moving objects can be substantially reduced by a shorter shutter time, and the depth of field can be extended by stopping down the lens – both parameters are essential to create better, more informative images



Versions

S-VIT F1 cameras are available in the following versions:

- **S-VIT F1:** 1'000 fps @ 640 x 480 pixels, mono or color
- **S-VIT LS:** modular camera model with a range of options (i.e. high resolution, extended frame rate) and extensions (i.e. CF interface) to configure the camera which suits your applications ideally.

Accessories

Every S-VIT F1 comes complete with an 'accessory kit', which includes:

- AOS Imaging Studio LIGHT software
- Power supply and cable
- Data cable (lockable, 5 m)

Users have to supply:

- Control PC (see 'technical specs' for minimal PC specifications)
- Lens (c-mount, 2/3" image size)

Lens cages to protect the lens during HiG impacts are available on request for a range of popular lenses

Accessories like lenses, lights, tripods, cases etc. can be purchased from AOS

Options and extensions

The S-VIT 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-VIT LS, a camera model for which a range of options and extensions are available.

Technical key specifications

Sensor (type, resolution)	CMOS APS Sensor, 640 x 480 pixels
Sensor size	8.96 x 6.72 mm (approx. 2/3"), 14 µm pixel size
Light sensitivity	ISO 3200 (monochrome), ISO 1600 (color)
Frame rate at full resolution	1,000 fps @ 640 x 480 pixels
Max. frame rate	1,000 fps.
Capacity Image memory	1.3 GB (standard), 2.6, 5.2 (optional)
Built-in battery, capacity	NiMH, 30 minutes
Data Interface	Gigabit Ethernet (1'000 Mb/s)
Shock resistance	100 G for 15 msec, 3 axis
Size, weight	71 x 71 x 121 mm, 900 gr

Complete technical specifications of our products are available as a separate document ('technical specs') from your AOS partner, or as a download from our webpage www.aostechnologies.com/downloads



Car crash (onboard)



Car crash (off board)

Your local AOS partner:

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



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