



PRODUCT LEAFLET

TECHNICAL SPECS

APPLICATION NOTE

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

### Applications

The S-MIZE 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-MIZE?

- Perfectly balanced performance – 1,000 fps @ 900 x 700 resp. 500fps@1280x1024 provides you with excellent image quality and a frame rate suitable for a wide range of automotive test applications
- Robust design – designed for many years of rough handling in HiG-applications (milled aluminum)
- 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-MIZE offers a light sensitivity greater than in previous cameras models. In many applications and settings, the camera delivers well-lit images without extra illumination, while in others only minimal extra light is necessary.

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

Modular concept – you don't have to buy an off-the-shelf product which might or might not suit your application. Have your S-MIZE configured for a perfect match by choosing from an extensive range of extensions

Selectable ROI – the customer can select the most suitable image format (ROI, region of interest) almost without limitations, for best camera performance and image quality



Car crash (on board)



S-MIZE (standard model)



S-MIZE 90 with data- and I/O-connectors mounted sidewise (90 deg. off the standard model with connectors on the back plate)

Your local AOS partner:

**IMAGING DYNAMICS, LLC**  
**734 207-8245**  
**EMAIL: IDBILLB@MSN.COM**  
**WEB: WWW.IMAGING-DYNAMICS.COM**

Specifications are subject to change without prior notice – v03.2012



AOS Technologies AG, Taefernstrasse 20,  
 CH-5405 Baden-Daettwil  
 Tel. +41 (56) 483 3488, Fax + 41 (56) 483 3489  
 info@aostechnologies.com  
 www.aostechnologies.com

## Versions

S-MIZE cameras are available in the following versions:

- **S-MIZE:** 500 fps @ 1280 x 1024 pixels resp. 1000fps @ 900 x 700 pixels mono or color

## Accessories

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

- AOS Imaging Studio FULL software
- Power supply and cable
- Data cable (5 m)

Users have to supply:

- Control PC (see 'technical specs' for minimal PC specifications)
- Lens (with an image diameter suitable for the selected resolution, i.e. c-mount lens (1") for a reduced resolution of 800 x 600 pixels or a format SLR lens (35 mm format) with F-to-c-mount adapter for full resolution)

Accessories like lenses and lens cages, lights, tripods, cases etc. are available from AOS

## Extensions

Several hardware based 'extensions' are available, i.e.

- CF interface
- Extended battery pack
- Video output.

These extensions have to be purchased together with the camera.

## Technical key specifications

<b>Sensor (type, resolution)</b>	CMOS APS Sensor, 1280 x 1024 pixels
<b>Sensor size</b>	Full resolution: 17.92 x 14.33 mm 14 µm pixel size
<b>Light sensitivity</b>	ISO 3200 (monochrome), ISO 1600 (color)
<b>Frame rate at full resolution</b>	500 fps @ 1280 x 1024 (option 2)
<b>Max. frame rate</b>	100,000 fps (at reduced resolution)
<b>Capacity Image memory</b>	1.3 GB (standard), 2.6, 5.2, 10.4 (optional)
<b>Built-in battery, capacity</b>	NiMH, 15 minutes (up to 2.5 hours with ext. battery pack)
<b>Data Interface</b>	Gigabit Ethernet (1'000 Mb/s)
<b>Shock resistance</b>	100G for 15msec, 3 axis
<b>Size, weight</b>	74 x 71 x 83 mm, 700 gr, resp. 92 x 71 x 67mm, 700 gr (model '90')

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](http://www.aostechnologies.com/downloads)