



PRODUCT LEAFLET

TECHNICAL SPECS

APPLICATION NOTE

## TRI-VIT – the compact ruggedized high speed camera for automotive safety testing. Full 1.3 Megapixel resolution at 1,000 fps

### Applications

The ruggedized TRI-VIT is especially suitable for all Hi-G applications where a minimal depth and full image resolution at 1,000 fps is required:

- 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 TRI-VIT?

- High performance at 1'000 fps with full resolution at 1280 x 1024 pixels creates images with high image quality at advanced frame rates
- Unique form factor with minimal depth, fitting into limited spaces where other cameras simply won't fit, allowing to position the camera closer to the object for an undisturbed sight
- Special feature set for multi-camera systems, with extensive trigger- and sync functions
- Ultra-robust design – milled from solid aluminium plates, tested and certified for shocks of up to 100 G in all 3 axis

### Unique features

Unique performance/size ratio: only camera with a full 1.3 MPixel image resolution at 1,000 fps in a housing just 46mm deep (1.8 inch) – get the best image quality from a camera positioned in places where no other camera would fit

An optional integrated non-volatile flash memory with ultra-fast download times. Immediately after the recording stops, the images are automatically downloaded to the built-in, non-volatile flash memory to secure the valuable image data. The camera returns automatically to the recording mode after the download is completed.

An optional 'display/control unit' allows an autonomous operation of the camera including live preview, recording and play back as well as downloading to the cameras optional flash memory. Its 4" color display allows an immediate review of the recorded sequence, and 4 configurable push buttons let the user operate the camera functions without an PC connected



The TRI-VIT backplate is flat for easy installation - all connectors, buttons and LEDs at the side



TRI-VIT with optional Display/control unit



Car crash (on board)

Your local AOS partner:

Specifications are subject to change without prior notice – v08.2011



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## Versions

TRI-VIT: 1,000 fps @ 1280 x 1024 pixels, mono or color,  
100,000 fps at reduced resolution

## Accessories

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

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

Users have to supply:

- Control PC (see 'technical specs' for minimal PC specifications)
- Lens (c-mount, 1" image size)

For HiG-applications, we offer a range of carefully designed and selected accessories to make the operation of the TRI-VIT more convenient and reliable:

- Display/control unit (4" display size, 4 buttons to operate camera)
- Lens cages
- Mounting plates
- I/O cables with rugged, lockable connectors

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

## Technical key specifications

|   |                                      |
|---|--------------------------------------|
| <b>Sensor (type, resolution)</b>          | Progressive CMOS, 1280 x 1024 pixels |
| <b>Sensor size</b>                        | 15.36 x 12.28 mm, 12 µm pixel size   |
| <b>Light sensitivity (gain setting 1)</b> | ISO 1600 (mono), ISO 1000 (color)    |
| <b>Frame rate at full resolution</b>      | 1,000 fps                            |
| <b>Max. frame rate</b>                    | 100,000 fps (at reduced resolution)  |
| <b>Capacity Image memory</b>              | 2 GB (standard), 4, 8 GB (optional)  |
| <b>Built-in battery, capacity</b>         | NiMH, 30 minutes                     |
| <b>Data Interface</b>                     | Gigabit Ethernet (1'000 Mb/s)        |
| <b>Video Interface</b>                    | PAL/NTSC (analog)                    |
| <b>Time stamping</b>                      | IRIG-B                               |
| <b>Size, weight (w/o lens)</b>            | 142.6 x 94 x 45.7 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](http://www.aostechnologies.com/downloads)