



PRODUCT LEAFLET

TECHNICAL SPECS

APPLICATION NOTE

Q-VIT – the ruggedized, compact high speed camera with an ultra-high resolution of 3MPixel

for automotive safety testing and harsh industrial as well as research applications.

More light sensitive than ever.

Applications

The Q-VIT 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 Q-VIT ?

- Ultra-high resolution of 3MPixel at 500fps
- 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 Q-VIT 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 Q-VIT 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)



Car crash (off board)

Your local AOS partner:

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



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Versions

Q-VIT cameras are available in the following versions:

- **Q-VIT:** 500 fps @ 1696 x 1710 pixels, mono or color

Accessories

Every Q-VIT 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 and Video interface. These extensions have to be purchased together with the camera.

Technical key specifications

Sensor (type, resolution)	Progressive CMOS, 1696 x 1710 pixels
Shutter type	Global electronic shutter
Shutter exposure times	2 µsec to 1/frame rate
Sensor size	13.56 x 13.68 mm, 8 µm pixel size
Light sensitivity	ISO 2000 (monochrome), ISO 1000 (color)
Frame rate at full resolution	500 fps @ 1696 x 1710 pixels
Max. frame rate	100'000 fps
Capacity Image memory	1.3 GB (standard), 2.6, 5.2, 10.4 GB (optional)
Built-in battery, capacity	NiMH, 30 minutes
Data Interface	Gigabit Ethernet (1'000 Mb/s)
Shock resistance	100G for 15msec, 3 axis
Size, weight	71 x 71 x 122 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