



PRODUCT LEAFLET

TECHNICAL SPECS

APPLICATION NOTE

## X-TREME – the ultimate compact high speed camera for use under the most demanding environmental conditions.

### Applications

The X-TREME camera is used in applications where no compromise in regards of camera reliability taking image data under severe environmental conditions is accepted. The self-containing camera is tested according MIL-810, DO-160, MIL 461 standards

Store separation tests – the camera meet and exceeds standard for most airborne applications. Due to its compact size the camera fits in existing installations. The flexible electronic interface grants an easy adaption to existing tests procedures. The camera adapts to the aircraft – not the aircraft to the camera.

UAV / UCAV – Where it is necessary to transmit live data recorded by the camera to the ground station for review X-TREME is ready to integrate into the aircraft telemetry system by the built in Gigabit Ethernet interface (Base 1000/100/10). During transfer the camera can record in the internal memory for up to 8'000 frames /second.

Naval Applications- When a camera is required close to the action where sea water is present X-TREME is the choice. The sealed camera will deliver data where other instruments quit

### Why the X-TREME?

Self contain camera- The X-TREME is a self containing camera that reliable works in hot, cold and wet environments. Nothing to worry about the environmental conditions before start collecting image data.

All-in-one concept – Pre-programming of camera in the lab does not make any PC connection necessary to start recording. The video output gives all the required information to adjust the camera on the scene

Designed for its use – Unlike other camera the X-TREME is not just a ruggedized camera but is engineered for working in tough environments. The design with lots of inputs from world wide renowned defence application test engineers was tested by an independent test lab to proof its reliability in the field



X-TREME is waterproof



X-TREME is made for airborne applications

(Image: NASA)

Your local AOS partner:



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## Unique features

With a resolution of 1280 x 1024 pixels up to 500 frames /second and the unique versatile interface options for integrating the camera into existing aircrafts makes X-TREME reliable yet economical choice for all your in-flight image data acquisition needs.

Based on a unique concept with hi-tech electronics, solid mechanics and innovative software the X-TREME can be placed where other cameras quit function at much lower levels. For truly autonomous applications there are possibilities to equip the camera with a large flash memory and an extended battery to operate the camera in the most severe environments.

For numerous applications with X-TREME AOS Engineers have closely worked with many customers around the world to provide customized and semi customized solutions at very attractive economical levels. A proper engineered solution involving the customer from the very beginning is the best assurance for not wasting precious budget money and get the job done right.

## Standard features

A standard X-TREME camera is equipped with

- a sensor with 1280 x 1024 pixel resolution and 10bit dynamic range
- a lens according customers request (see technical specs) / seperate document
- basic cabling
- power supply

## Extensions

X-TREME cameras can be easily adapted to the specific needs of the user. Due to the modular concept adaption to test requirements are not very resource intensive and therefore very economical solutions for the end user. You get the camera that fits the test.

## Engineering

AOS Technologies does have a broad experience in application where best fit to the user is a must. We have supplied numerous unique solutions to worldwide renowned customers. Contact us to discuss your application or for customer references.

## Technical key specifications

Sensor (type, resolution)	CMOS APS Sensor, 1280 x 1024 pixels
Sensor size	15.36 x 12.28 mm (approx. 1"), 12 µm pixel size
Light sensitivity	ISO 1200 (monochrome), ISO 600 (color)
Frame rate at full resolution	500fps @ 1280 x 1024 pixels
Max. frame rate	32,000 fps (at reduced resolution).
Capacity Image memory	1.3 GB (standard), 2.6, 5.2, 10.4 (optional)
Built-in battery (optional)	NiMH
Data Interface	Gigabit Ethernet (10/100/1'000 Mb/s)
Environmental tests	acc. DO160E / MIL 81 (see Tech Specs, test reports available on request)
EMI tests	acc. DO 160D / MIL 461
Camera control software	Engineeres acc. DO 178
Size, weight	85 x 85 x 200mm, 2000 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)