

Application

Digital high speed cameras for airborne applications

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Industry
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Research
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Automotive
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Defense

Subject

Existing film-based high speed cameras need to be replaced with digital high speed cameras as the film material becomes unavailable. Furthermore, the maintenance costs for the film-based cameras are increasing, plus the availability of spare parts gets problematic. New requirements in airborne testing also ask for digital high speed cameras with features not available with film-based cameras.

However, the digital cameras have to meet the relevant MIL-standards, and the integration costs have to be kept to a minimum. Ideally, the new digital camera is compatible to the film-based camera.

Like the film-based camera, the digital high speed camera is mounted inside a bin underneath the airplanes fuselage, looking through a plexi window to monitor the release of various payloads.

Solution

The digital high speed camera X-EMA is designed and made specifically for this application. The X-EMA is tested and certified according to relevant standards such as MIL-STD-810.

Customer benefits

The X-EMA is very compact and robust. It can be configured to 'simulate' a film-based camera by means of input- and output signals, plus it can be equipped with a wide range of connectors (i.e. AM-PHENOL) to keep the integration simple.

- Multi sequence recording, 2-4 sequences with each flight
- Automatic download to built-in CF card
- Dual storage in camera's internal memory and CF card
- Gigabit Ethernet connection
- Small size, only 71 x 71 x 138 mm
- Fast operational procedure with minimum disturbance of test process



Camera bin underneath aircraft



X-EMA installed in camera bin



X-EMA high speed camera

Scope of supply

- X-EMA high speed camera with built-in CF interface for automatic download
- lens with lens cage
- tilt/rotate camera bracket with quick-release plate

Competitive advantage:

By using the unique concept of X-EMA camera and taking advantage of AOS' engineering expertise, the user got the transition from film to digital camera recording in minimum time, cost and - most important for the user - changes on the test aircrafts. AOS provided training for the camera operator and is of course a reliable partner for after sales support, extension on camera operation (e.g. for UAV operation) and last but not least assures long-term availability of spare parts.

Customers:

- Flight test centres
- Aircraft manufacturers
- Integrators of test- and measurement equipment for aircrafts

Your AOS Partner:

Specifications are subject to changes without prior notice – v0810