

ARGOS 410-Z

Airborne Surveillance System



- Outstanding, all weather image quality during the day and at night
- Superb stabilization achieved by a four axis gimbal design
- TV images simultaneously in two spectral ranges (VIS, IR)
- Optional: Laser rangefinder, integrated high accuracy IMU for geo-pointing and localization, and laser pointer



We make it visible.

ARGOS 410-Z

High resolution images – clear decisions

The ARGOS 410-Z airborne surveillance system uniquely fulfills military and paramilitary requirements. It consists of three components: a stabilized turret assembly, an interface electronics unit, and an ergonomically designed handgrip control unit for operation. Superior image quality is achieved by coarse/fine two axis stabilization optimized for airborne applications.

The ATTICA thermal imager from Carl Zeiss Optronics is the sensor heart of the ARGOS 410-Z. It generates very clear, crisp images. With its minimum of four fields of view (maximum of 12) and advanced image processing features, including edge enhancement, local adaptive dynamic compression and electronic zoom, it offers exceptional detection, recognition and identification ranges.

The high-resolution colour 3CCD camera is supported by a powerful zoom lens to guarantee optimal long range performance.

Technical data

Sensor configuration

ATTICA thermal imager

Wave band	7.9 μm –9.1 μm	3 μm –5 μm
Detector	384 x 288	640 x 512
	CMT array	CMT array
	768 x 576	1280 x 1024
	(2 x 2 μ -Scan)	(2 x 2 μ -Scan)
Super narrow field of view		1° x 0.75°
Narrow field of view (h x v)	2.7° x 2.0°	2.0° x 1.6°
Medium field of view (h x v)	11.3° x 8.5°	8.0° x 6.4°
Wide field of view (h x v)	21.3° x 16.0°	20.0° x 16.0°
Electronic zoom	2 x	2 x
Focus	Manual or automatic	

Color TV camera

TV sensor	3CCD
Field of view (h)	0.72°–28.5° (40x optical zoom)
Zoom	20 x
Focal length extender	2x (switchable)
Focus	Manual

Laser rangefinder

Laser type	Erbium glass
Wavelength	1.54 μm (eye-safe)
Measuring range	80 m to 20,000 m
Measuring accuracy	$\leq \pm 10$ m
Resolution	5 m

Laser pointer

Wavelength	830 nm \pm 20 nm
Power & class	60 mW, fixed setting class IIIb
Operating mode	Continuous
Divergence	0.26 – 0.30 mrad

Stabilized turret assembly

Type	4 axis
Stabilization	< 20 μrad rms
Angle of azimuth	360° continuous
Angle of elevation	+20° to –120°
Dimensions (h x diameter)	495 mm x 410 mm
Weight	45 kg (including 3 sensors)

Available options/features

Searchlight slaving	To SX-16 and Nightsun II
Autotracker	Correlation type
System interfaces	ARINC 429 and RS-422
Aircraft interfaces	<ul style="list-style-type: none">■ GPS■ Search radar■ Moving map display■ MMI console■ AHRS (for geo location LOS pointing capability)■ CRT or LCD monitors■ Analog or digital VCRs■ Simple mechanical interface with quick release
Data transmission	Real-time video/audio digital microwave downlinks

ARGOS 410-Z meets the MIL-810-D and MIL-461-C military standards. The software fulfills the RTCA/DO-160D Level D standard.

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