L-3 Sonoma EO

474 GUARDIAN™

Long-Range Stand-Off EO/IR Imaging System

SONOMA 400 SERIES STABILIZED IMAGING SYSTEMS

Sonoma's 400 Series products are ultra high-performance EO/IR stabilized imaging systems designed for long-range surveillance & reconnaissance on airborne, shipborne and ground-based platforms. Sonoma's 400 Series combines precision stabilization technology, X-Mast™, and long focal length, shared aperture Hydra™ lenses, ensuring mission success through increased stand-off and excellent image clarity.

KEY FEATURES

- Unmatched stabilization maximizes imaging performance
- Shared aperture Hydra-11™, 11-inch telescope in both visible & IR saves space and weight
- Integral laser rangefinder
- Ruggedized gimbal electronics box (GIB) offers additional image processing functionality
- All-digital design provides progressive scan cameras to maximize stored resolution
- Video compression
- Multi-target tracking
- Human machine interface / hand controller
- Console customization

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When the Mission Matters

TURRET PHYSICAL CHARACTERISTICS

Active Gyro-Stabilization	5-axis
Platform Range of Motion	Elevation: +30° to -120°; Azimuth: 360° continuous
Platform Angular Velocity	2 radians/sec
Platform Angular Acceleration	>4 radians/sec^2
Platform Stability	2 µrads
Outside Diameter	20.8 inches
Weight (turret with sensors)	186 lbs
Weight (GIB)	35 lbs

SENSOR #1 INFRARED

Lens Type	Sonoma Hydra-11™
Primary Aperture	11 in
Sensor	3–5 µm InSb staring array
NFOV (mechanical)	< .7° (horizontal)
MFOV (mechanical)	5.2° (horizontal)
WFOV (mechanical)	22.3° (horizontal)
Resolution	640 x 512 pixels
Signal format	Analog and digital outputs available

SENSOR #2 VISIBLE SPOTTER IMAGER

Lens Type	Sonoma Hydra-11™
Primary Aperture	11 in
Sensor	3-chip high-resolution visible camera
NFOV Aperture Diameter	10.82 in (275 mm)
Focal Length	4800 to 1400 mm
Signal Format	Analog and digital outputs available

SENSOR #3 LOOK AROUND ZOOM (LAZ)

Sensor	3-chip high-resolution visible camera
NFOV Aperture Diameter	2.7 in
Fields of View	0.53° to 14.4° horizontal
Signal Format	Analog and digital outputs available

SENSOR #4 EYE-SAFE LASER RANGEFINDER

Rangefinder Type	Erbium-glass
Range Accuracy	< ±5 m (1 sigma)
Max Range	20 km

SENSOR #5 LASER POINTER (optional)

BENEFITS

- Longer stand-off – Assess and mitigate threats at longer distances
- Superior reliability – Cost-effective solutions
- Fuel savings – Sensors are placed low in the turret resulting in reduced air drag

AIRBORNE APPLICATIONS

- Precision GEO-Pointing
- High Value Target detection (HVT)
- Hull Identification Number recognition (HIN)
- Positive combat ID
- Tactical situational awareness
- Littoral and broad area maritime surveillance
- Combat support / covert observation
- Reconnaissance / precision targeting
- Local Area Contrast Enhancement (LACE)

Without LACE processing

With LACE processing

OPTIONS AVAILABLE

- Auto-tracker
- GEO-Pointing

ISO 9001:2000 QUALITY

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428 Aviation Blvd

Santa Rosa, CA 95403

Tel: 707.568.3000

www.L-3Com.com/SonomaEO

L3 communications

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L-3. Headquartered in New York City, L-3 Communications employs over 64,000 people worldwide and is a prime contractor in aircraft modernization and maintenance, C^{3}ISR (Command, Control, Communications, Intelligence, Surveillance and Reconnaissance) systems and government services. L-3 is also a leading provider of high technology products, subsystems and systems.