

COAPS™-LM

Maritime High-Performance, Lightweight Panoramic Sight



The COAPS-LM is a Stabilized Panoramic Sight that provides multichannel target detection, acquisition and tracking capabilities using high-end sensors and advanced video processing. Lightweight, compact, modular and cost-effective, the COAPS-LM can be integrated with land or maritime platforms and is ideal for autonomous surveillance in onshore or offshore reconnaissance missions. Additionally, the COAPS-LM can be integrated with Counter-Unmanned Aerial Systems (C-UAS), enhancing its capability to detect and identify aerial threats.

Modular Configuration for Best-in-Class Functionality

COAPS-LM features advanced sensors and image processing capabilities in a unique add-on system. This modular solution is designed to provide long-range target acquisition day and night, in stationary or dynamic operations – delivering 360° in azimuth and 80° in elevation for enhanced landscape orientation against marine, land and aerial threats. Its integration with C-UAS systems ensures comprehensive protection against Unmanned Aerial Systems (UAS), making it a versatile solution for modern battlefield survivability requirements.

Uniquely configured with compact dimensions, this system features a small mechanical interface to the platform. The system's architecture supports integration with all types of Marine Weapon Stations, FCSs (Fire Control Systems), additional sensors and C2 (Command & Control) Systems.

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Sensors and Image Processing:

COAPS-LM features advanced Sensors and Image Processing that includes a 3-5µm Thermal Channel, a Full HD Color Camera Day Channel, an Eye-safe Laser Rangefinder (ELRF) and an integrated video tracker with NIR Pointer (optional).

Stabilization and Payload:

This all-in-one unit includes Control Electronics and interfaces with a Line-Of-Sight (LOS) Gyro-Stabilized Gimbal (Azimuth and Elevation Axes).

COAPS-LM provides the following Operational Modes:

- Stabilized (decoupled) for independent ISR missions
- Slaved (coupled) for engagement missions using the platform's gun/weapon station
- Tracking for stabilized continuous reconnaissance while the platform and/or the target are dynamic

Technical Specifications

| Sight | |
|------------------------------|--|
| LOS motion span | AZ: 360° x N EL: - 20° to + 80° |
| Stabilization accuracy | ≤ 0.1 mRad* *Depends on vibration profile and sea state |
| Positioning/slaving accuracy | ≤ 0.200 mRad |
| Weight | 42kg |

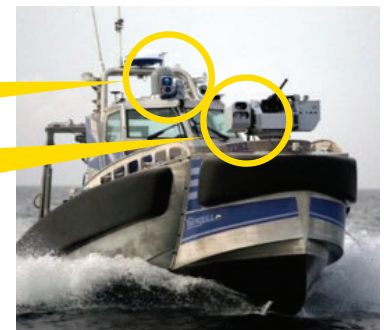
Key Features

- Fully compatible with marine environment
- Lightweight and compact
- 360° x N travel in azimuth, -20° to +80° in Elevation
- Modular configuration (USV – Unmanned Surface Vehicles, Weapon Stations, Vessel Surveillance, C-UAS)
- Video Analytics capabilities (a Video Analytics Unit is required)
- Day/Night operation in harsh environments
- Advanced Sensors and Image Processing
- Simple to handle by operators and by maintenance personnel
- Cost-effective

| Eye-Safe Laser Rangefinder (ELRF) | |
|-----------------------------------|---------------|
| Wavelength | 1.540µm ± 5µm |
| Range (2.3x2.3 NATO target) | 50m to 7km |
| Max range | 20Km |
| Range accuracy | ± 5m |
| Safety class | Class I |

| Sensors | Thermal Channel | | Day Channel |
|--------------------------------|-----------------------------|-----------------|--|
| | Standard | Extended | |
| Spectral range | 3µm – 5µm | | Color: 400nm – 700nm Full - (B/W): 400nm – 1000nm (user selectable) |
| Detector | 640x512 / 15µ | 1280x1024 / 10µ | Color CMOS 1/1.8, 3.19MEP |
| Video interface | PAL (4:3) and HD-SDI (16:9) | | PAL (4:3) and HD-SDI (16:9) |
| FOVs cont. Zoom | 1.5° – 27° | 2° – 27° | 2° – 27° |
| E-Zoom | x2 | x2 | x4 |
| DRI performance (NATO 2.3x2.3) | | | |
| Detection | 20km | 22km | 14km |
| Recognition | 8.7km | 10.1km | 9.5km |
| Identification | 4.4km | 5.6km | 5.7km |

Multiple installation options



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