

# COAPS-L

High-performance, light-weighted day & night panoramic sight



The COAPS-L stabilized panoramic sight provides day & night target detection, acquisition and tracking capabilities using high-end sensors and advanced AI/ML video-analytics. Lightweight, compact, modular and cost-effective, the COAPS-L can be integrated with MBTs, AFVs, armored cars, light tactical vehicles and un-manned ground vehicles (UGVs).

## Modular configuration for best-in-class functionality

COAPS-L features advanced sensors and image processing capabilities in a unique add-on system. This modular solution is designed to provide long-range day and night target acquisition in stationary or on-the-move operations. The solution's open architecture supports integration with command and control systems.

Uniquely configured with compact dimensions, the system features a small mechanical interface to the platform and minimal volume inside the turret or vehicle.

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### Sensors and image processing:

COAPS-L features Artificial Intelligence (AI) and Machine-Learning (ML) video analytics algorithms to automatically detect and classify threats.

Advanced sensors include a 3-5  $\mu\text{m}$  thermal channel, an HD color camera day channel, an eye safe laser rangefinder and an integrated video tracker.

### Stabilization and payload:

This all-in-one unit includes control electronics and interfaces with a stabilized line-of-sight (LOS) azimuth and elevation gimbals. Operational modes include point stabilization, slave-to-gun and slave-to-target.

### Key features

- Lightweight and compact
- 360° x N situational awareness
- Automatic target detection and classification
- Modular configuration & installation on various platforms
- Modular MBT/AFV sight (commander / gunner)
- Day/night operation in harsh environments
- Simple maintenance
- Optional ballistic armor protection

### Multiple installation options



### Technical Specifications

Sight	
LOS freedom	AZ: 360° xN EL: -20° - 80°
Stabilization accuracy	Stationary: $\leq 0.015$ mRad (1 $\sigma$ ) Mobile (30 kmh): $\leq 0.07$ mRad (1 $\sigma$ )
Positioning/slaving accuracy	$\leq 0.200$ mRad(1 $\sigma$ )
Weight	40kg

Eyesafe laser rangefinder (ELRF)	
Wavelength	1.534 $\mu\text{m}$
Range (2.3x2.3 NATO target)	50 to 7000m
Max range	20000m
Range accuracy	$\pm 2\text{m}$ (1 $\sigma$ ) up to 2km range $\pm 3\text{m}$ (1 $\sigma$ ) more than 2km
Safety class	Class I

Sensors	Thermal Channel		Day Channel
	Standard	Extended	
Spectral range	3 $\mu\text{m}$ - 5 $\mu\text{m}$		400nm - 700nm
Detector	640x512 / 15 $\mu$	1280x1024 / 10 $\mu$	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	1.7° - 27°	2° - 27°	2.0° - 27°
E-Zoom	x2	x2	x4
DRI performance (NATO 2.3x2.3)			
Detection:	17.5km	25km	13km
Recognition:	8.2km	9.8km	7.9km
Identification:	4.5km	5km	5km



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