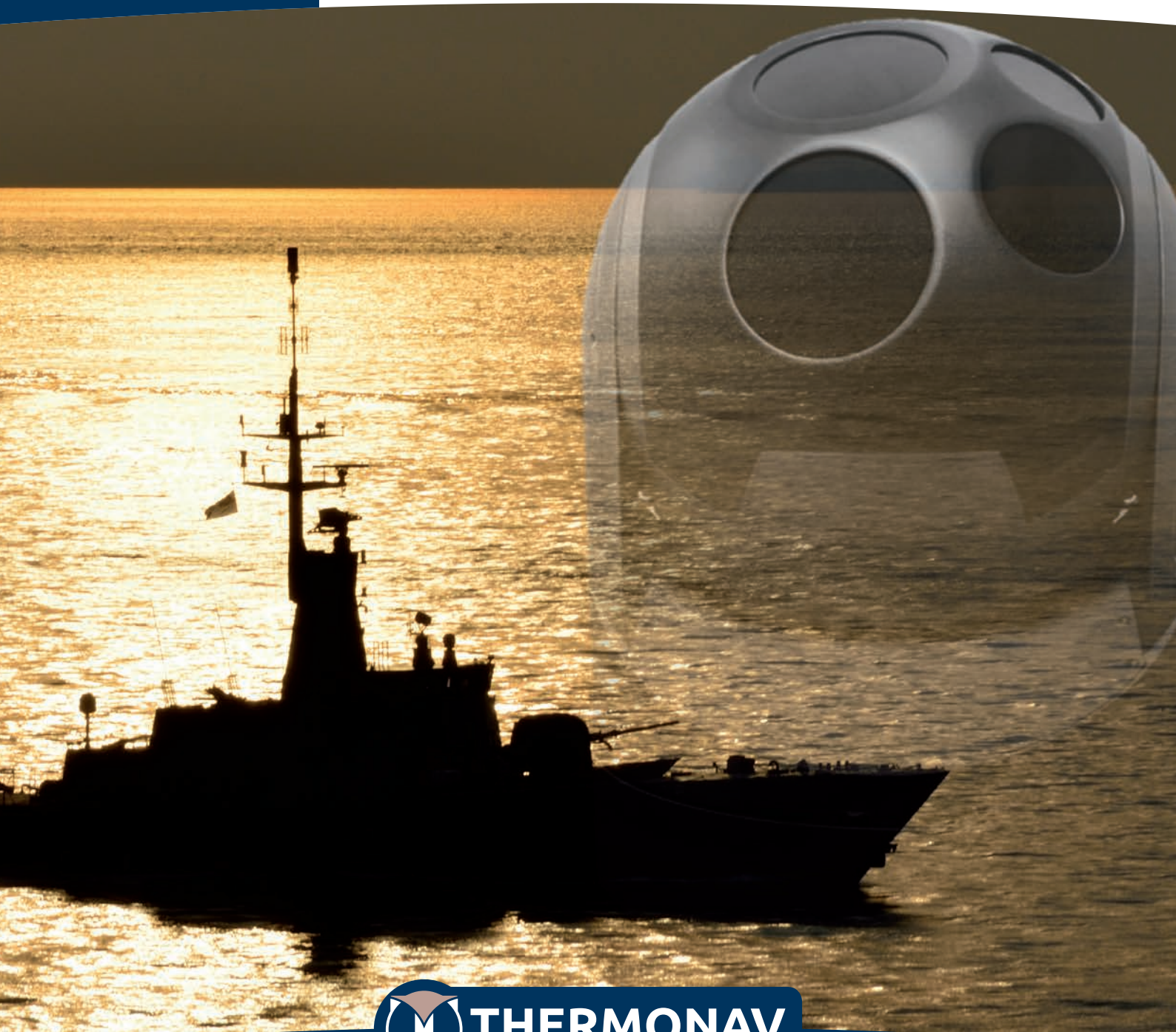


Defense

SEAGUARDIAN EOSS-T300
Electro-Optical Surveillance System

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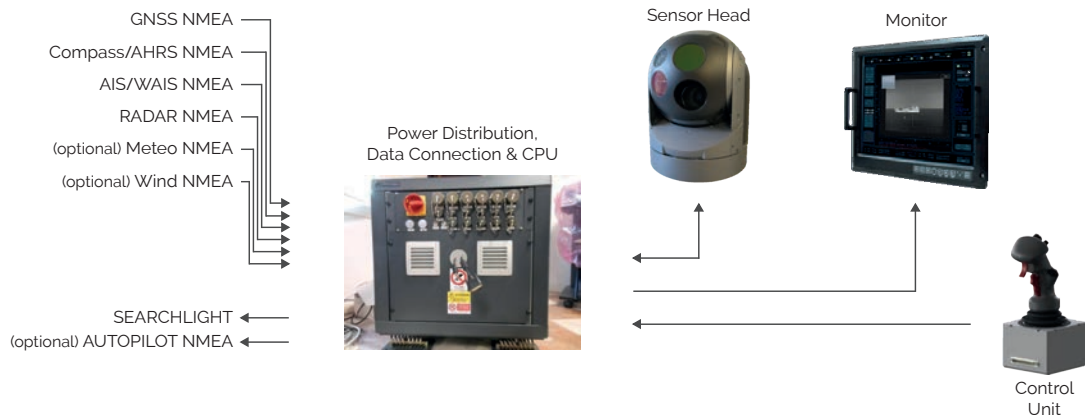
SeaGuardian EOSS-T300 is a state-of-the-art solution for observation sight. Based on Trakka TC-300 gimbal, SeaGuardian EOSS-T300 is a compact, high performance, new generation long range multi-sensor system managed by a MIL-SPEC compliant console with advanced features for search and rescue operations, maritime patrol, sea control, border security, homeland protection and surveillance operations. SeaGuardian EOSS-T300 is equipped with a complete sensor suite comprising of a MWIR thermal camera and color HDTV camera both with continuous optical zoom and optionally: laser rangefinder, laser pointer and laser illuminator. SeaGuardian EOSS-T300 can be integrated into SeaGuardian TMS – Tactical Mission System.

Key Features

Advanced Sensor for Medium and Long Range Sight	Full sensor suite providing complete multi-spectral coverage (TI, HDTV, low light HDTV, LRF, LP, LI)
Automatic Object Detection and Target Tracking	Video Tracking (multiple algorithm capability: Centroid, Correlation, Scene, Phase Correlation, Combined), Multiple Target Track, Moving Target Detection Radar/AIS Tracking (multiple algorithm capability: Track Engage, Track Scan, Track Last, Track Cursor), Target Classification and Data Fusion with automated capture of target snapshot images
Image Enhancement	Advanced real-time digital HD image processing engine (multiple algorithm capability: Electronic Image Stabilization, Image Blending, Digital Contrast Enhancement, Highlights Target, IR/TV Image Fusion, Local Area Contrast Processing, Edge Sharpening, Image Noise Reduction, Picture In Picture)
GEO-Lock	GEO Pointing, GEO Location, GEO Tracking
Surveillance Mode	Real-time Video Panorama Stitching with marked detected target and relative info, Azimuth Scan Sectors, Scan List Preset Points
Mission Recorder	Mini-VDR (Voyager Data Recorder with selectable sampling 2+99sec): Data & Time (UTC), Ship Position (GNSS LAT/LON and Mission Grid Map), Heading, Speed, Gimbal Orientation (Azimuth, Elevation), FOV (Field of View), Video Channel Used (IR/TV) (up to 365 days) Recording and Playback of Encrypted and Georeferenced Videos and Photos (days selectable at the order) Event and Warning Datalog (up to 365 days)
Advanced Encryption	AES-256
Power Distribution, Data Connection and CPU	Rack 19" 10U with Wire Ropes Isolators, Power Distribution, Data Connection, Signal and Image Processing (Video Input: PAL, NTSC, HD-SDI)
Built-In Test (BIT)	Multiple algorithm capability: Power-up, Periodic, Initiated
Smart Integrations	Searchlight slaving for Search & Rescue (SAR) or Oil Spill Detection (OSD) missions Output data and videos over ethernet (H.264 video compression) Optionally: Smart glasses for visualizing images, navigation data and target information in Augmented Reality (AR) mode



SeaGuardian EOSS-T300 System Configuration



Range Performance

	Identification	Recognition	Detection
	1.9Km	3.5Km	9Km
	3.3Km	6Km	15.5Km
		15Km	20Km >20Km

Technical Specification

Gimbal (TCU)	Specifications
Size	300mm diameter
Number	4 axis, active gyro-stabilization
Weight	Approx. 18Kg
AZ Coverage	N x 360° continuous
EL Coverage	+120° to -20°

HD Color TV Camera (*)	Specifications
Sensor Type	1/2.8" Exmor CMOS
Number of Pixels	~ 2.38 MPX
Continuous Zoom	(1080p) 63.7°±2.3° (720p) 42.5°±1.55°
Minimum Illumination	1.4 lx

Infrared Camera (*)	Specifications
Detector Size	640 x 512 px
Detector Technology	Cooled, focal plane array
Spectral Wavelength	3 ÷ 5 µm
Continuous Zoom	25°±2° or 24°±1.8° (optional)

Laser Range Finder (*) (Optional)	Specifications
Type	Eye-safe
Wavelength	1535nm
Range	12km (standard) 20km (optional)
Accuracy	±5 meters

Laser Pointer (Optional)	Specifications
Type	Class 3B
Wavelength	852nm
Output Power	100 mW

Laser Illuminator (Optional)	Specifications
Type	Class 3B
Wavelength	860nm
Power	450 mW

Electrical Requirements	Specifications
Input Voltage	230VAC or 24VDC (DC with wide range input voltage)

(*) Optionally, we can provide a different configuration with higher performance



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