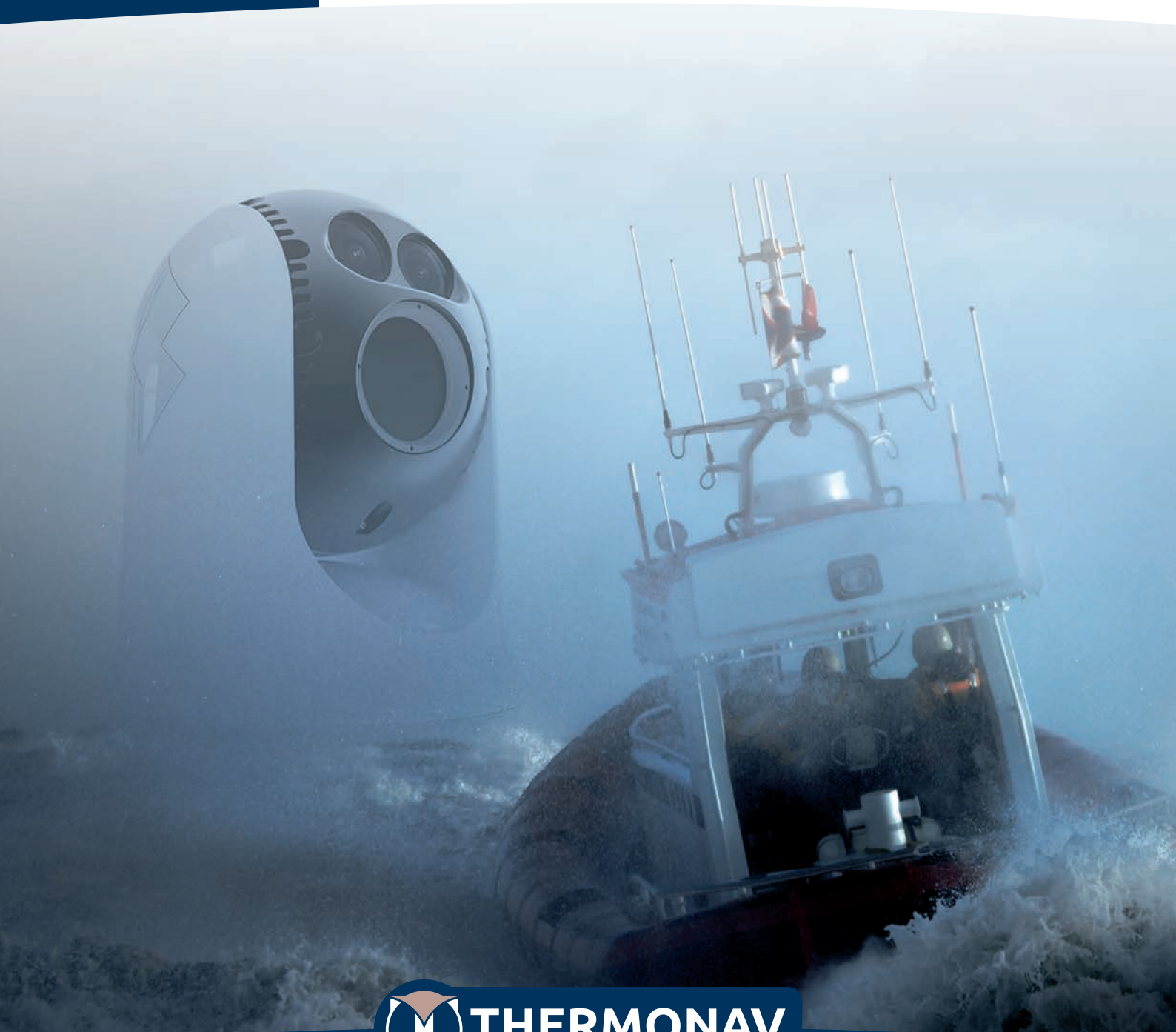


Defense

SEAGUARDIAN EOSS-F500
Electro-Optical Surveillance System

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SeaGuardian EOSS-F500 is a state-of-the-art solution for observation sight. Based on FLIR M500 gimbal, SeaGuardian EOSS-F500 is a compact, high performance, new generation medium and 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-F500 is equipped with a complete sensor suite comprising of a MWIR thermal camera and color HDTV camera both with continuous optical zoom and embedded spotlight.

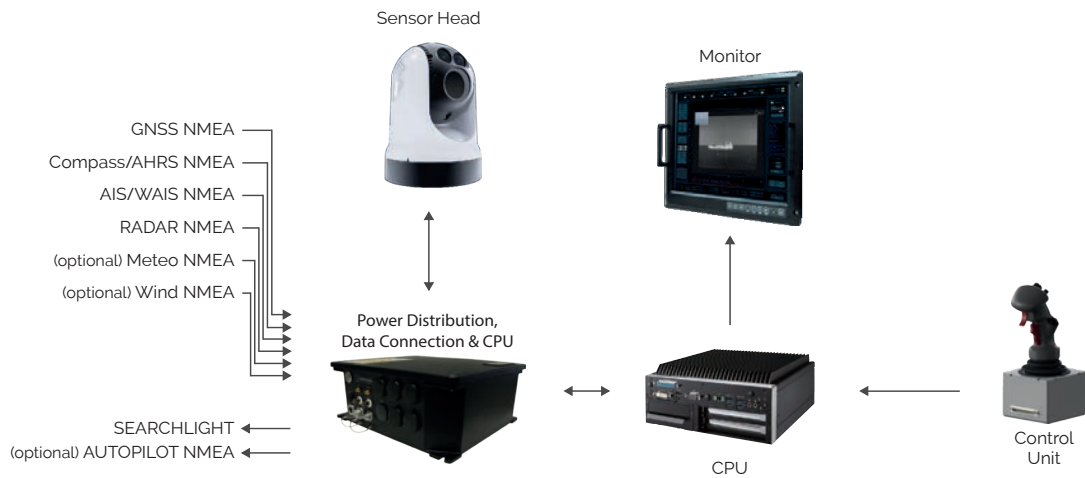
SeaGuardian EOSS-F500 can be integrated into SeaGuardian TMS – Tactical Mission System.

Key Features

Advanced Sensor for Short and Medium Range Sight	Complete sensor suite providing multi-spectral coverage (TI and HDTV)
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	High performance rugged CPU for Signal and Image Processing (Video Input: PAL, NTSC, HD-SDI), Rugged Power Distribution and Data Connection Unit
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 (2 channels of streaming MPEG-4, H.264, or M-JPEG video compression) Optionally: Smart glasses for visualizing images, navigation data and target information in Augmented Reality (AR) mode



SeaGuardian EOSS-F500 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	273 mm diameter
Number of Axis	2 axis, active gyro-stabilization
Weight	20.4 Kg
AZ Coverage	N x 360° continuous
EL Coverage	+90° to -90°

HD Color TV Camera	Specifications
Sensor Type	1/2.8" CMOS
Number of pixel	~ 2.38 MPX
Continuous Zoom	63.7° ÷ 2.3°
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	28° ÷ 2°
Continuous E-Zoom	4x

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



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