

# TrakkaCam<sup>®</sup> TC-300M-S



## A NEW-GENERATION OF COMPACT HIGH PERFORMANCE MULTI SENSOR SURVEILLANCE SYSTEMS

Ideally suited for naval and coastguard maritime missions including coastal and riverine patrol, search and rescue, illegal immigration protection, drug interdiction, economic exclusion zone (EEZ) protection, anti-piracy, maritime patrol, naval ISR and naval vessel force protection, manned and unmanned platforms and installations.

### TRAKKA SYSTEMS TC SERIES

The new TC series from Trakka Systems features advanced technology in an ergonomic industrial design that sets new standards for compact, high-performance, multispectral imaging in a non-ITAR single-LRU configuration.

The TC-300M-S is MIL tested and built to withstand the harsh environmental conditions of maritime operations. Its EO/IR sensors are augmented with sophisticated image processing, to see through conditions such as fog, haze, low light, and total darkness. An advanced high-speed digital video engine embedded directly within the single-LRU gimbal provides several standard and optional functions, such as Moving Target Indicator (MTI) with Drone Detection Mode, reducing operator workload, and increasing system performance in adverse conditions.

All systems can be interfaced with moving map systems, maritime radar systems, Automatic Identification Systems (AIS), and secure data links. These attributes enable operators and command centers to share mission-critical information in real time, while providing enhanced situational awareness via augmented reality overlays or pure synthetic views.

### KEY BENEFITS

- Optimized for maritime operations
- Performance better than 10" competitors, and approaching that of bigger systems, but at lower price / lower mass
- 4-axis active gyro stabilization with integrated 6-axis passive isolation for superior image stabilization
- Advanced sensors, superior in size class:
  - Available with a full suite of 7 payload options: (IR, HDTV, LRF, LP, LI, A/T, IMU/GPS)
  - Continuous optical zoom on all imaging channels for maximum situational awareness
  - Choice of MCT or InSb thermal imagers
  - Open upgradeable architecture for incorporation of new technology sensors
- The advanced real-time digital HD image processing engine is embedded in gimbal and requires no additional electronics unit
- Moving Target Detection (MTI) embedded directly into the system
- Fully Integrated IMU/INS with dual GPS capability for static navigation operations
- Compact Single-LRU configuration is easy to install, integrate and requires no junction box
- MIL-STD & IP66 Tested for Environmental, Electromagnetic and Mechanical compliance, and capable of withstanding the harshest environments
- Non-ITAR exportable product



# TC-300M-S

## GIMBAL SPECIFICATIONS

Weight	~20 kg (44 lb)
Diameter	300mm (11.8")
Azimuth	Continuous Azimuth
Elevation	+120° to -20° Elevation
Stabilization	4 axis, active gyro-stabilization with integrated 6 axis passive isolation

## THERMAL IMAGER

Type	3-5µm MWIR array
Resolution	640x512 (1280x720 Optional)
Fields of View	27° to 1.3° (HD Option 40 to 2.4), Continuous Zoom
Sensor Type	Cooled

## HDTV CAMERA

Type	HD CMOS
Resolution	2.37 MPixels
Fields of View	35° to 1.3°
LLTV Mode	Yes

## LASER RANGE FINDER (OPTIONAL)

Wavelength	1535 nm, Eye-safe
Range	12km (20km Optional)
Repetition Rate	1 Hz or Single-Shot Modes

## LASER POINTER (OPTIONAL)

Type	Class 3B
Wavelength	830nm
Output Power	80mW

## LASER ILLUMINATOR (OPTIONAL)

Type	Class 3B
Wavelength	860nm
Output Power	450mW

## ELECTRICAL REQUIREMENTS

Max power	320W Maximum Power
Steady State Power	100W Steady State
Input Voltage	22-36V Wide-Range Input Voltage

## OPTIONS

Interface Types	SMPTE HD video outputs and H.264 over Ethernet (MISB 0601.7 Compliant), RS422, RS232
Functional Interfaces & Features	Auto Tracking, Geo-Location with integrated IMU/INS, Metadata, Moving Maps & Augmented Reality, Remote Control, Searchlight Slaving, Radar Slaving, AIS and other NMEA 0183 Interfaces, Data Links & Video Downlinks

## ENVIRONMENTAL

Standards	MIL-STD 461, MIL-STD 810, RTCA DO-160, IP 66, IEC 60945
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Note: All FOVs are 720p



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## FEATURES

- Moving Target Indicator (option)
- Object Tracking / Scene Tracking Modes (option)
- Image Blending (option)
- EO De-Fog (Haze Penetration) Processing
- Digital Contrast Enhancement
- Local Area Contrast Processing
- Edge Sharpening
- Image Noise Reduction
- Picture in Picture / Split screen
- Graphical On-Screen Display for Intuitive Operation

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