

TrakkaCam[®] TC-375M



A NEW GENERATION OF HIGH PERFORMANCE, LONG-RANGE MULTI SENSOR SURVEILLANCE SYSTEMS

Ideally suited for long-range naval and coastguard maritime missions including 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, full HD (1080p), long-range, multispectral imaging in a non-ITAR single-LRU configuration.

The TrakkaCam[®] TC-375M is MIL tested and built to withstand the harsh environmental conditions of maritime operations. The system's long-range 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 is embedded directly within the single-LRU gimbal delivering several standard and optional functions, such as Moving Target Indicator (MTI) with Drone Detection Mode, reducing operator workload and increasing system performance under 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
- Advanced sensors, superior in size class:
 - Available with a full suite of 8 Payload options: (HD MWIR, HDTV, HDTV Spotter, LRF, LP, LI, A/T, IMU/ GPS)
 - Continuous optical zoom on all imaging channels for maximum situational awareness
 - Best-in-class narrow FOVs, no need for separate spotter scopes
 - Open upgradeable architecture for incorporation of new technology sensors
- Non-ITAR, widely exportable product
- Moving Target Detection (MTI) embedded directly into the system
- High performance 4-axis active gyro stabilization with integrated 6-axis passive isolation for superior image stabilization
- Fully Integrated IMU/INS with dual GPS capability for static navigation operations
- Embedded H.264 video over ethernet with MISB 0601.7 Compliant Metadata. No need for separate encoder.
- Innovative and ergonomic system design provides flexible platform and installation options
- 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



TC-375M

GIMBAL SPECIFICATIONS

Weight	<45 kg (99lb)
Diameter	375mm (14.7")
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	1280 x 1024 (15µm)
Fields of View	38° to 1.29°

COLOR HDTV (SPOTTER)

Type	HD CMOS Global Shutter
Resolution	3.2 MPixels
Fields of View	11.02° to 0.34°

COLOR HDTV

Type	HD CMOS Global Shutter
Resolution	2.37 MPixels
Fields of View	35° to 1.3°

LASER RANGE FINDER (OPTIONAL)

Wavelength	1535 nm, Eye-safe
Range	20km
Repetition Rate	0.5Hz 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

Power Requirements	<280W average (<350W max)
Input Voltage	22-36V Wide-Range Input Voltage

OPTIONS

Interface Types	SMPT E HD video outputs and H.264 over Ethernet (MISB 0601.7 Compliant), RS422, RS232
Functional Interfaces & Features	Auto Tracking, Moving Maps & Augmented Reality, Remote Control, Searchlight Slaving, Radar Slaving, AIS and other NMEA 0183 Interfaces, Data Links & Video Downlinks



FEATURES

- Moving Target Indicator (option)
- Target Tracking / Scene Tracking Modes (option)
- Image Blending (option)
- EO De-Fog (Haze Penetration) Processing
- 4x Electronic Continuous Zoom
- Digital Contrast Enhancement
- Local Area Contrast Processing
- Pseudo Color IR Palettes
- Edge Sharpening
- Image Noise Reduction
- Picture in Picture / Split screen
- Graphical On-Screen Display for Intuitive Operation

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Note: All FOVs are 720p. This information is provided for reference only. Specifications are subject to change without notice.
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