TrakkaCam®
TC-300

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

Ideally suited for a variety of airborne missions, including law enforcement, search and rescue, civil protection, military ISR and force protection, fire detection and mapping, as well as 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 EO/IR sensors are augmented with sophisticated image processing, allowing users to see through conditions such as fog, haze, low light, and total darkness. Image blending provides the ability to exploit imagery from the different sensors and extract details that would otherwise go undetected by a single sensor. A host of image processing features to improve operator performance and reduce workload, such as Moving Target Detection (MTI), are embedded right into the system.

The TC-300 has enhanced interfaces that provide easy integration with 3rd party equipment. Unlike competing imagers, the TC-300 integrates advanced features like dual-stream H.264/H.265 video with KLV metadata over ethernet right into the system, removing the need for external encoders and enabling simplified integration with Moving Map and datalink systems.

The TC-300 enables 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

- Performance better than 10” competitors, and approaching that of bigger systems, but at lower price / lower mass
- 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
  - Best-in-class narrow FOVs, no need for separate spotter scopes
  - 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) embeded 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 providing Geo Location and Geo Hold, with easy Moving Maps integration
- 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
- Non-ITAR exportable product
- RTCA DO-160 Tested for Environmental, Electromagnetic and Mechanical compliance, and capable of withstanding the harshest environments

TC-300

GIMBAL SPECIFICATIONS

Weight	~22kg (48.5 lb)
Diameter	300mm (11.8")
Azimuth	Continuous Azimuth
Elevation	+20° to -120° Elevation (+90 Stow)
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	30° to 1.28° (HD Option 40° to 2.4°), continuous zoom
Sensor Type	Cooled

COLOR HDTV

Type	HD CMOS Global Shutter
Resolution	3.2 MPixels
Fields of View	24.9° to 0.63°, continuous zoom

LASER RANGE FINDER (OPTIONAL)

Wavelength	1535 nm, Eye-safe
Range	12km (20k Optional)
Repetition Rate	0.5 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

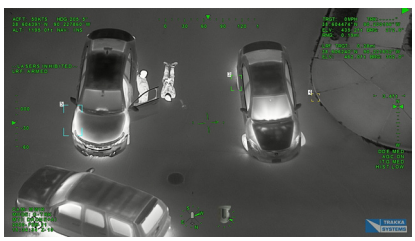
Max power	320W Maximum Power
Steady State Power	100W Steady State
Input Voltage	22-36V Wide-Range Input Voltage

OPTIONS

Interface Types	SMPTE HD video outputs and H.264/H.265 over Ethernet (MISB 0601.7 Compliant), RS422, RS232
Functional Interfaces & Features	Auto Tracking, Geo-Location with integrated IMU/INS, Interface to Aircraft INS/GPS, Metadata, Moving Maps & Augmented Reality, Remote Control, Search-light Slaving, Radar Slaving, Data Links & Video Downlinks

ENVIRONMENTAL

Standards	MIL-STD 461, MIL-STD 810, RTCA DO-160



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

FEATURES

- Moving Target Indicator (option)
- Object Tracking / Scene Tracking Modes (option)
- Digital Contrast Enhancement
- Local Area Contrast Processing
- Edge Sharpening
- Image Noise Reduction
- Picture in Picture / Split screen
- 4x Electronic Continuous Zoom
- Graphical On-Screen Display for Intuitive Operation

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