

TrakkaCam[®] TC-300-UC



A NEW-GENERATION OF COMPACT LOW COST 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, 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-UC has enhanced interfaces that provide easy integration with 3rd party equipment. Unlike competing imagers, the TC-300-UC 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.

As an uncooled IR system, the TC-300-UC eliminates the complexity, weight, and maintenance requirements of cryogenic cooling, making it an ideal, cost-effective choice for missions where fast deployment is paramount.

KEY BENEFITS

- Cost effective solution for shorter range missions
- 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
- 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
- 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
- Ergonomic and compact 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



TC-300-UC

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	8-12µm LWIR array
Resolution	640x512
Fields of View	29° to 5.9°, continuous zoom
Sensor Type	Un-Cooled

HDTV CAMERA

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

LASER RANGE FINDER (OPTIONAL)

Classification	Class 1, Eye-safe
Range	12km (options available)
Repetition Rate	Continuous 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	480mW

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