

TrakkaCam[®] TC-375 QUAD



THE NEXT GENERATION MULTI SPECTRAL SYSTEM FOR UTILITY AND ENVIRONMENTAL INSPECTIONS

Ideally suited for a variety of airborne missions including power line asset and pipeline inspections, wildfire fighting, and other applications that require accurate, non contact temperature measurements in real-time.

TRAKKA SYSTEMS TC SERIES

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

The TrakkaCam[®] TC-375 QUAD multi-spectral cameras consist of a radiometric long wave thermal imager, a high definition daylight camera, a UV detection sensor, a high megapixel digital stills camera and a laser rangefinder.

A high-speed, digital video engine is embedded directly within the single-LRU gimbal delivering several standard and optional functions such as Image Blending, Geo Functions and auto tracking to improve mission effectiveness and reduces operator workload.

The TC-375 QUAD has an enhanced interface to provide easy integration with the TM-100 Video and Mission Management System and streams the videos with KLV metadata over Ethernet right into the system.

KEY BENEFITS

- Compact Single-LRU configuration is easy to install, integrate and requires no external electronics box.
- 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.
- Embedded video streaming over Ethernet with MISB 0601.7 Compliant metadata.
- Advanced sensors:
 - LWIR, MWIR, HDTV, UV, Digital Still, LRF, IMU/GPS.
 - Advanced multi-mode Auto Tracker.
- IR Temperature readings in real-time.
- Fuses Corona discharges onto LWIR/HDTV for a unified view to enhance operator efficiency and reduce workload.
- Seamless interoperability with the TM-100 saves integration time and lowers ownership costs by having one manufacturer.
- Non-ITAR exportable product.
- RTCA DO-160 Tested for Environmental, Electromagnetic and Mechanical compliance.
- EASA POA and MOA production and maintenance facility assures the highest quality standards.



TC-375 QUAD

GIMBAL SPECIFICATIONS

Weight	<45 kg (99lb)
Diameter	375mm (14.7")
Azimuth	Continuous Azimuth
Elevation	+20° to -120° Elevation (+90 Stow)
Stabilization	4 axis, active gyro-stabilization with integrated 6 axis passive isolation

THERMAL IMAGER

	OPTION 1	OPTION 2
Type	7.5-14µm LWIR microbolometer array	7.7-9µm LWIR cooled FPA
Resolution	1024 x 768 pixels	640 x 512 pixels
Fields of View	16° to 12° (fixed optic)	9.1° to 3° continuous zoom
Temperature Reading Accuracy	+/-1.0°C, (+/-1.5% above 100°C)	+/-2.0°C, (+/-2.0% above 100°C)
Temperature Reading Range	-40°C to 1200°C	5° to 150°C (optional to 1200°C)
Digital Zoom	up to 4X continuous	up to 4X continuous

COLOR HDTV

	OPTION 1	OPTION 2
Type	HD CMOS Global Shutter	CMOS progressive scan
Effective Pixels	1936 x 1226	3840 x 2160
Fields of View	36° to 1.3°	39° to 2.3°
Digital Zoom	up to 4X continuous	Up to 4X continuous

UV CAMERA

Detector	Advanced Solar Blind
Resolution	1936 x 1216 pixels
FOV	Overlays on IR and HDTV FOVs

DIGITAL STILL CAMERA

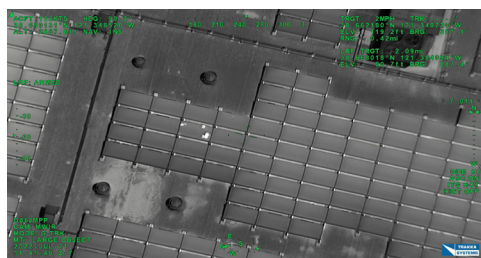
	OPTION 1	OPTION 2
Detector Size	35.9 x 23.9 mm	43.9 x 32.9 mm
Effective Pixels	45.7 MPixels	120 MPixels
Lens	70-200mm continuous zoom / f2.8	150mm fixed optic / f5.6
FOV	28.8°(H) to 10.3°(H) continuous	16.7° x 12.6°

LASER RANGE FINDER

Wavelength	Class 1 Eye-safe
Range	Various available
Max. Repetition Rate	Continuous or Single-Shot

ELECTRICAL REQUIREMENTS

Power Requirements	<280W average (<350W max)
Input Voltage	22-36V Wide-Range Input Voltage
Interface Types	SMPTE HD video outputs and H.264 over Ethernet (MISB 0601.7 Compliant), RS422, RS232



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