



TC-300-R

Radiometric Camera System with High Definition Thermal and TV cameras.

GYRO STABILIZED GIMBAL

For stable, long range imaging, a fully digital 4-axis active gyro stabilization system compensates for aircraft maneuvering and eliminates external vibrations.

SUPERIOR PERFORMANCE THERMAL IR

High precision measurement accuracy, superb image quality and long-wave solar reflection immunity provide outstanding performance for applications requiring real time temperature readings.

THERMAL RADIOMETRIC OUTPUT

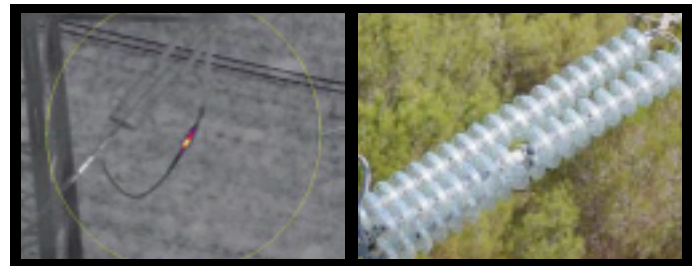
The radiometric output provides full thermal resolution images for temperature analysis and reporting.

GEO-REFERENCING/TRACKING

The IMU/INS combined with the laser rangefinder provides and holds the geographical locations of points of interest. The tracker locks the camera to any structure or scene.

RELIABILITY

In order to ensure reliability, the gimbal is designed and tested according to RTCA DO 160 standards.



FEATURES & APPLICATIONS

The TC-300-R imaging system offers commercial users the capability to measure temperatures in real time and to collect high resolution video from an airborne platform. The systems can be fully integrated with geo-spatial recorders, mapping systems and reporting software to deliver comprehensive fault reports to industry users. The products are completely ITAR-free and are widely exportable.

Typical applications include:

- Powerline asset inspection
- Right of Way (ROW) surveys
- Storm damage assessment
- Pipeline inspection
- Agriculture monitoring
- Environmental surveys
- Animal surveys
- Forest fire fighting and mapping
- Building heat loss measurement



Features

- Compact, Single LRU system
- Real time temperature measurements and radiometric temperature analysis
- High Definition thermal camera
- High Definition TV video camera
- Geo-location and Geo-pointing
- Scene/Object tracking

GIMBAL SPECIFICATIONS

Weight	<20 kg (44 lb)
Diameter	300mm (11.8")
Azimuth	Continuous Azimuth
Elevation	+20 to -120 (+90 Stow)
Stabilization	4 axis, active gyro-stabilization

Thermal Imager

Array Size	1024x768 pxl (Optional 2,048x1,536 opto-mechanical MicroScan)
Lens	12°x16° (optional 24°x32°)
Detector	Microbolometer FPA
Spectral Range	7.5-14µm
Thermal Sensitivity	up to 20mk
Temp Accuracy	+/-1.0°C, (+/-1.0% of reading)
Focus	Manual and Auto Focus
Digital Zoom	up to 4X

HDTV Camera

Type	HD CMOS Global Shutter
Resolution	3.2 MPixels
Fields of View	54.0° to 2.0°
Optical Zoom	30X
Digital Zoom	up to 4X

ELECTRICAL REQUIREMENTS

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

ACCESSORIES

Standard Config	Turret Camera Unit, Hand Control Unit, Cable Kit
Optional	Radiometric Package including thermal analysis and report generating Software IMU/INS and LRF for GEO reference capabilities Scene/Object tracking
Interface Types	SMPTE HD video outputs and H.264 over Ethernet (MISB 0601.7 Compliant), RS422, RS232



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