



SWE-400 QUAD

High Performance Inspection System with High Resolution Radiometric Infrared, Corona Detection, HD TV and Digital Still Photo 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.

CORONA DETECTION

The solar blind camera detects UV discharges in the full daylight.

DIGITAL STILL PHOTOS

The 36.3 Megapixel photo camera provides high resolution still images for reporting purposes.

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 - ENVIRONMENTAL DESIGN

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

FEATURES & APPLICATIONS

The SWE-400 QUAD multi-sensor imaging system offers commercial users the capability to measure temperatures in real time, to detect Corona discharges and to collect high resolution video and digital still images 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



SWE-400 Quad

- Four unique sensors combined into a compact camera platform
- Real time temperature measurements and radiometric temperature analysis
- Solar Blind UV detection camera
- High Definition TV video camera
- 36.3 Megapixel Photo Camera
- Geo-location and Geo-pointing
- Scene/Object tracking

PERFORMANCE SPECIFICATIONS

GIMBAL SYSTEM

Type	Four Axis Active Gyro Stabilized Gimbal
Stabilization	≈ 15 μRad
Coverage Az	360° continuous
Coverage El	+20° to -120°
Dimension	Ø 400 mm (15.7")
Weight	31kg (68lb)
Power	20-30VDC, 250W

DAYLIGHT TV CAMERA

Type	Full HD 1080p
Image Sensor	1/2.8" CMOS
Number of Pixels	≈ 2,380,000 Pixels
Optical Zoom	30x (60° to 2°)
Digital Zoom	Yes

THERMAL IR CAMERA

Array Size	1024x768 pixels
Lens	12°x16° (optional 24°x32°)
Detector	Microbolometer FPA
Spectral Range	7.5-14μm
Thermal Sensitivity	<0.02°K
Focus	Manual and Auto Focus
Digital Zoom	Yes
Temp Accuracy	+/-1.0°C, (+/-1.0% of reading)

CORONA UV CAMERA

Detector	Bi-Spectral UV, Solar Blind Imager
FOV	8°x6°
Spectral Range	250-280nm
Focus	Auto Focus
Features	Gain, Counting

FRAME CAMERA

Resolution	36.3 Megapixel
Detector	35.9x24mm CMOS Image sensor
Focus	Auto Focus
Lens	135mm (optional 180mm, 70-200mm zoom)

ACCESSORIES

Standard Config	Turret Camera Unit, Hand Control Unit, Interface Unit, cable kit Radiometric Package including thermal analysis and report generating Software
Optional	Scene/Object tracking IMU/INS and LRF for GEO reference capabilities
Installation Kit	Available for most helicopter types, please enquire



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