



► ***GYRO Stabilised Pan & Tilt Platform with Thermal Imager***

- Coastal Patrols
- Port Surveillance
- Sharp imagery between FoV settings
- Fast Situational Awareness
- Detect man-sized objects at 2.6 Km
- Rugged, sealed enclosure
- Detect targets at range in total darkness, through fog, mist, and most obscurants

The Gyro-Stabilised Thermal Imaging System (GSTIS) from Focus 2000 Infrared is a high performance thermal imaging system that incorporates the latest in un-cooled Vox detector technology.

The GSTIS contains a 320 × 240 un-cooled microbolometer focal plane detector array.

The GSTIS features a dual field-of-view (WFOV = 20° × 15°, NFOV = 5° × 3.75°) for wide area surveillance, and close-up inspections. Electronic zoom as well as auto-focus are included for enhanced target recognition, along with freeze frame capabilities, and various image enhancement functions.

The GSTIS can be configured for stand-alone operation, or it can be fully configured into a comprehensive surface surveillance network. This makes it an ideal solution for a wide variety of applications including perimeter surveillance, border surveillance, and force protection.



GYRO Pan & Tilt

Thermal Technical Specification

Sensor Type	320 x 240 VOx Long-wave microbolometer
Number of field of View	2
Wide FOV	20° x 15°
Narrow FOV	5° x 3.75°
F#	1.44
E-zoom	1x to 4x Continuous
Spectral band	7.5-13 µm
Automatic features	Auto focus, Digital Detail enhancement (DDE), colour palettes

System Features

IR detector stand-by mode	Saves power
Built in Test (BIT)	Intelligent self diagnostics tests vital functions
Start up time from stand-by	< 10 sec
Lens Defroster	Supports artic use (requires separate power supply and control)

Outputs

Video	NTSC (RS-170) or PAL (CCIR, composite and S Video (Y/C)
Connector types	IP67 (RS-232, power, composite video)

Power

Power requirements	24V DC
Power consumption	7 W (average)

Environmental

IP Rating	IP 66
Operating temp	-32°C to 55°C (-26°F to 131°F)
Storage temp	-40°C to 70°C (-40°F to 158°F)
Shock, operational	25g, IEC 62-2-29
EMI	MIL-Std 461D

Interfaces

Command and Control	RS232
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Standard Package

Included accessories	Operation manual, cables, power supply
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GYRO Stabilisation Performance

Range	± 100° per second // Pre-set Auto Pan
Resolution	0.003° per second
Gyro Sensitivity	< 0.01° per second
Noise	< 0.03° per second
Feature	Pre-set Auto Pan
Temperature Range	-30°C to + 60°C
Stabilisation Accuracy	Better than 0.08°

The GSTIS incorporates a gyro stabilised pan and tilt, as the camera platform that employs gyroscopes to stabilise the thermal imaging camera against vehicle/vessel motion, achieving a stable picture in mobile applications.

The platform allows the thermal imaging camera to be accurately positioned on a target, irrespective of the motion of the vehicle/vessel on which it is mounted. A robust joystick is used to manoeuvre the camera in both the pan and the tilt axis.

Push-button switches and LED indications are incorporated, along with a serial data interface, to control the finer aspects of the platform and to monitor its performance.