



TITAN 385ES MULTI-SENSOR TURRET SYSTEM

SELEX Galileo has been a leading supplier of stabilised airborne electro-optical sensor systems for over three decades. Titan 385ES is the latest Multi-Sensor Turret System designed for the demanding airborne environment.

The Titan 385ES Multi-Sensor Turret System combines high performance sensors into a single Line Replaceable Unit (LRU) solution, to meet the operational demands of today's airborne observation, surveillance and reconnaissance requirements.

SELEX Galileo has delivered turrets worldwide for fixed wing, rotary wing and unmanned aircraft platforms. Our extensive customer base includes various branches of the UK armed forces as well as civil and military platform operators worldwide.

Titan 385ES incorporates SELEX Galileo's latest high performance infrared staring focal plane array sensor technology, offering high resolution night vision capability in either the mid or long wave infrared wavebands. A number of infrared optic configurations are available dependent on the operational application.

The infrared camera is supplemented as standard by a high performance zoom colour television camera, a solid state low light level television (L3TV) camera and an eye-safe laser rangefinder.

Optional sensor configurations include a colour/low light monochrome spotter-scope and laser illuminator/pointer. Titan 385ES may also be configured with a subset of the standard sensor fit should the requirement demand.

Titan 385ES incorporates an embedded auto-tracker capable of operating on any of the imaging sensor channels. Graphics processing and aircraft interfaces are also integrated into the single LRU design of Titan 385ES.

Primary control of Titan 385ES is via the Control Grip Unit (CGU). In addition a Control Switch Unit (CSU) provides supplementary controls such as sensor configuration and Built in Test (BIT) control. The CSU functionality can optionally be embedded as softkeys into a Multi-Function Display Unit (MFD) or into the customers host system.

SELEX Galileo recognises the importance of system serviceability and have designed Titan 385ES to be rapidly installed and removed. Typical installation times are less than 20 minutes.

TITAN 385ES Multi-Sensor Turret System



Suitable for Fixed and Rotary wing multi-role platforms

TECHNICAL SPECIFICATIONS

INFRARED SENSOR

| | |
|-------------------------|--|
| Detector type | HgCdTe (MCT) Staring focal plane array |
| Array size | 640 x 512 |
| Operating waveband | 3 - 5µm (8 - 12µm optional) |
| Image Resolution | 640 x 512 (1280 x 1024 optional) |
| Infrared optic aperture | F/2 (F/4 optional) |
| Fields of view† | WFOV - 18° x 14.4° (WFOV - 9° x 7.2° optional) NFOV - 3.6° x 2.8° (VNF0V - 1.8° x 1.4° optional) plus electronic magnification † based on F/2 3-5µm system (Alternative lens configurations available) |

COLOUR CAMERA

| | |
|----------------|--|
| Detector type | 3 CCD |
| Optics | 20:1 continuous optical zoom |
| Fields of view | 18° to 0.9° (9° to 0.45° optional) Auto-matched to IR FOV |

LOW LIGHT LEVEL TELEVISION (L3TV) CAMERA

| | |
|--------------------|--|
| Detector type | Solid state CCD |
| Optics | Various to customer's requirement |
| Sensitivity | 10 ⁻³ - 10 ⁵ Lux |
| Operating waveband | 450 - 1100nm |

LASER RANGE FINDER

| | |
|----------------------|----------------|
| Type | Erbium glass |
| Operating wavelength | 1540nm |
| Range | 80m to 20,000m |
| Range Accuracy | ± 5m |

OPTIONAL SENSORS

| | |
|--------------------------|--------------|
| Laser illuminator | 810 - 850 nm |
| Low light spotterscope | |
| Uncooled infrared camera | 8 - 12µm |

SYSTEM

| | |
|----------------------|---|
| EO Turret Dimensions | 385mm (dia.) x 525mm (height) |
| EO Turret Weight | 48kg (System Controller additional 3kg) |
| Slew rate | >100°/s |
| Field of regard | 360° continuous in azimuth and elevation |
| Airspeed | 300 knots (operational) 400 knots (carriage) |
| Mounting | Upright or pendulous |
| Interfaces | Mil-Std-1553B ARINC 429 (optional) RS232 / RS422 (control interfaces) |



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For more information please email sales.marketing@selexgalileo.com

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