



EOSS 250TC, EOSS 250TC-S, Tri-Field

EOSS 250TC/250TC-S

Axsys Technologies | General Dynamics Advanced Information Systems

Long Range Thermal Imaging System

The Axsys EOSS 250TC is a premier long-range surveillance and security solution for mobile and stationary land, air, and sea related operations.

The EOSS thermal imager will detect man-sized targets at ranges in excess of 4km making it one of the most comprehensive imaging systems available today. The EOSS 250TC is widely deployed throughout the world protecting ground troops in forward operating bases through programs such as TASS, C-RAM, and FPS-2, and securing borders and protecting critical infrastructure.

The EOSS 250TC is a tri-field-of-view (17, 60, and 250mm) imaging system and is available with an advanced cooled sensor in a 320 x 256, 30µm pitch focal plane array or optional 640 x 512, 15µm pitch focal plan array for maximum resolution (EOSS 250TC-S). The EOSS 250TC has an integrated visible camera with 26x optical zoom and is mounted on a 360° precision Axsys APS 50 pan and tilt system. The camera also has an optional laser rangefinder and laser illuminator/pointer. The integrated joystick controller operates the system with push button interaction.



Key Features

- Cooled 3-5µm infrared detector
- 320 x 256, 30µm pitch focal plane array and 640 x 512, 15µm pitch focal plane array
- Boresighted CCTV with 26x zoom for visible detection
- Tri-field-of-view – 17mm, 60mm, 250mm (31.5°, 9.1°, 2.2°)
- Integrated precision pan and tilt system
- Integrated controller and joystick
- Optional laser rangefinder
- Auto and manual focus

Key Benefits

- Easy integration with mobile and fix-mount surveillance applications
- Superior imaging capabilities improves target recognition
- Rugged design ideal for use in harsh environments
- High MTBF ensures low cost of ownership

Technical Specifications

EOSS 250TC/250TC-S System

Video Format	NTSC/PAL/Differential
Serial Interface	RS-422
Power Requirements	18-28VDC (direct to P/T), 100-240VAC or 12VDC (with DCU)
Environmental	<ul style="list-style-type: none"> Unit sealed and dry nitrogen backfilled Front Element Defroster Operating Temperature Range: -32°C to +60°C Non-Operating Temperature Range: -33°C to +71°C
Controls	<ul style="list-style-type: none"> Controls available on a hand held joystick, or through a PC via an RS-232/422 link Proportional Pan and Tilt speed controls Field ofView and Focus Slaving: Visual/Thermal Field ofView Switch Focus (Auto/Manual) Auto Scan with 10 tables of 10 user-defined presets, variable speed, dwell, & camera selection
Weight	~60 lbs (27kg) (Pan/tilt head & sensors)

Pan/Tilt Head

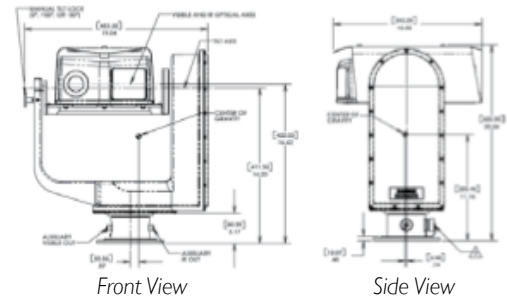
Pan	360° continuous
Tilt	±60°
Accuracy	0.25°
Repeatability	0.1°
Position Rate Pan	<0.1° to >300°/second
Tilt	<0.1° to >300°/second

Thermal Camera Characteristics

EOSS 250 Detector	320 × 256 InSb, FPA 30µm pitch
EOSS 250-S Detector	640 × 512 InSb, FPA 15µm pitch
Spectral Band	3–5µm
Type	Motorized Remote Focus Tri-Field ofView 17/60/250mm Optical System
f/#	4
Field ofView	31.5° × 23.9° (Wide) 9.1° × 6.9° (Medium) 2.2° × 1.65° (Narrow)
Controls/Features	High Sensivity Mode Multiple Color Palettes Inverse Polarity

Visible Camera Characteristics (CCTV)

Sensor	¼" IT CCD (Super HAD) Approx. 630k Pixels (NTSC) Approx. 740k Pixels (PAL)
FOV (26X optical zoom)	42° to 1.6°, Continuous Optical Zoom
Digital Zoom	12X
Resolution	470 TV lines NTSC (460 PAL)
Min. Illumination	<2.0 lux (1/60 sec) 0.05 lux (¼ sec)
Signal to Noise	<50dB



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