

EOSS-250TC



Axsys' EOSS-250TC is a premier long-range surveillance and security solution for mobile and stationary land, air, and sea related operations. Using Axsys' proven technology, the EOSS-250TC offers one of the most comprehensive integrated thermal imaging systems available today.

The EOSS-250TC's tri field of view thermal imager will detect man-sized targets at ranges in excess of 4km in good conditions. Operating in the 3–5 μ m spectral region, it utilizes advanced cooled photodetector technology in a 320 x 256 InSb, 30 μ m pitch focal plane array. The EOSS-250TC's optical system, equipped with an automatically controlled defroster, is protected with a proprietary diamond-like hard carbon coating designed to withstand the harshest of conditions, while the interior elements utilize extremely efficient anti-reflection coatings that provide outstanding transmission. The EOSS-250TC is self contained in a nitrogen backfilled environmentally sealed enclosure.

The EOSS-250TC's impressive integrated system features a thermal camera and a visible camera with 18x optical zoom, mounted on a 360° pan/tilt base, as well as an optional laser rangefinder and an optional laser illuminator/pointer. The integrated joystick controller operates the system with push button interaction.

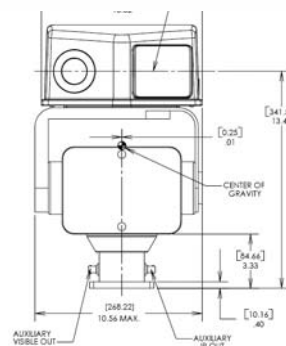
Axsys provides leading-edge IR equipment to the security and surveillance sector. Axsys' proprietary optical designs, state-of-the-art laboratories, and vertically integrated manufacturing capabilities ensure maximum performance and dependability.

Security/Surveillance

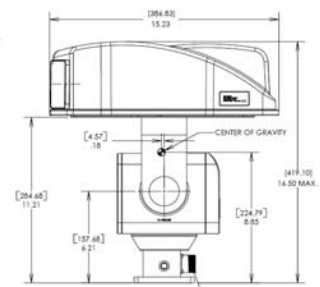
Long-Range Thermal Imaging Camera

Features Include:

- Auto Focus
- High Sensitivity Mode
- Multiple Color Palettes
- Optional Laser Rangefinder
- Optional Illuminator-Pointer
- Integrated Pan/Tilt Mounting
- Tri-Field of View (17/60/250mm)
- Integrated Controller and Joystick
- 31.5°, 9.1° and 2.2° Fields of View
- Cooled 3-5 μ m IR Detector Technology
- Boresighted CCTV with 18X Zoom for visible detection
- Target detection: Man >4km, Vehicle >9.5km



EOSS-TV 250TC: Front View



EOSS-TV 250TC: Side View



EOSS-250TC System Specifications

Axsys Part Number	22951-600 (LRTI)
Video Format	CCIR601 NTSC or PAL-M
Frame Rate	60 Hz NTSC, 50 Hz
Serial Interface	RS-232 or RS-422
Power Requirements	110/220V AC, 50/60Hz
Environmental	<ul style="list-style-type: none"> Unit is sealed and backfilled with dry nitrogen. Front Element Defroster Operating Temperature Range: -32°C to +49°C Non-Operating Temperature Range: -33°C to +71°C
Controls	<ul style="list-style-type: none"> Controls available on a hand held joystick, on a tabletop display and control unit, or through a PC via an RS-232/422 link Proportional Pan and Tilt speed controls. Field of View and Focus Slaving: Visual/Thermal Field of View Switch Focus (Auto/Manual) Auto Scan with 10 tables of 10 user-defined presets, variable speed, dwell, and camera selection
Weight	<35 lbs.(15.9kg)(Pan/tilt head & sensors)

Thermal Camera Characteristics

Detector	320 x 256 Cooled InSb FPA, 30µm pitch, 320 x 240 usable format
Spectral Band	3-5µm
Detector MTBF Type	≥ 7,500 hours
f/#	4
Field of View NETD	2.2° x 1.65°, 9.1° x 6.9°, 31.5° x 23.9°
Controls/Features	<ul style="list-style-type: none"> Motorized Remote Focus and Dual Field of View 50/250mm Optical System High Sensitivity Mode Multiple Color Palettes Inverse Polarity

Visible Camera Characteristics (CCTV)

Sensor	1/4 " IT CCD (EXview HAD), 768 x 494 pixels (NTSC), or 752 x 582 pixels (PAL)
FOV (18x Optical Zoom)	48° to 2.7°, continuous optical zoom
Digital Zoom	12X
Resolution	470 TV lines NTSC (460 PAL)
Min. Illumination	≤ 0.7 lux
Signal to Noise	≥ 50dB



Pan/Tilt Head

Pan	360° Continuous
Tilt	-45° to +60° Minimum
Accuracy	0.25°
Repeatability	0.05°
Position Rate	Pan ≤ 0.1° to ≥60°/second Tilt ≤ 0.1° to ≥60°/second

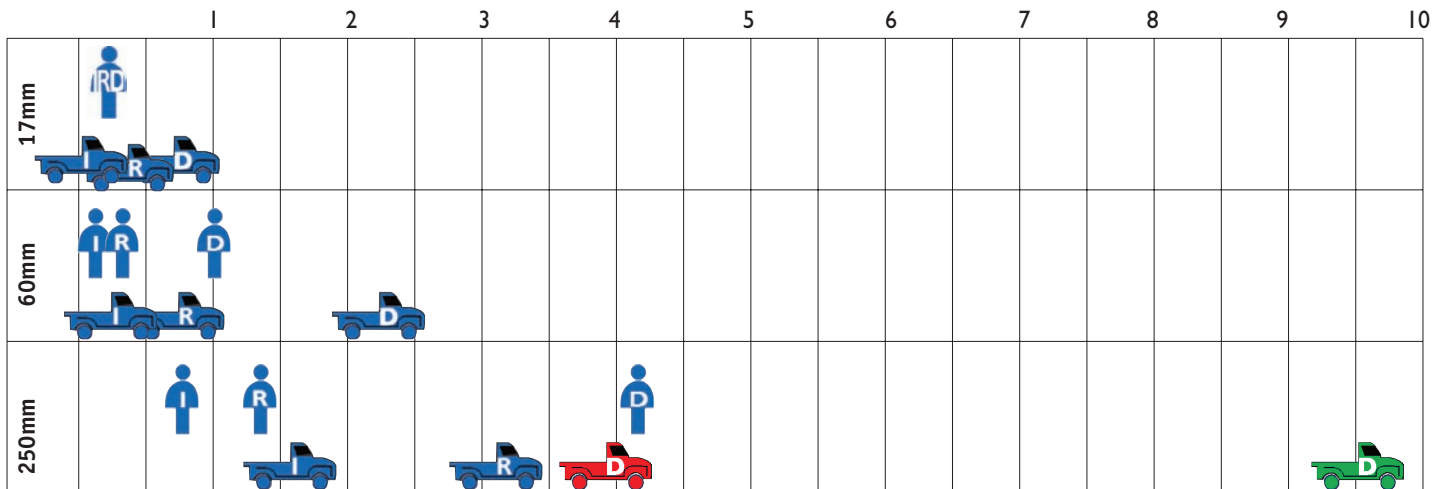
Range Performance

D = Detection
R = Recognition
I = Identification

GREEN = Good Conditions
RED = Poor Conditions
BLUE = Same in all conditions

 = Target Size (1 x 1m)
 = Target Size (2.3 x 2.3m)

Range in Kilometers



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Manufacturer reserves the right to change specifications to reflect latest changes in technology and improvements at any time without notice. Export is subject to US Government regulations.



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