

EOSS 250-DC/250-DC-S

Security/Surveillance



EOSS 250-DC
EOSS 250-DC-S
Dual Field

Axsys' EOSS 250DC sets a worldwide standard for mobile and stationary long range thermal imaging solutions, offering a wide array of surveillance and security features in a fully integrated system.

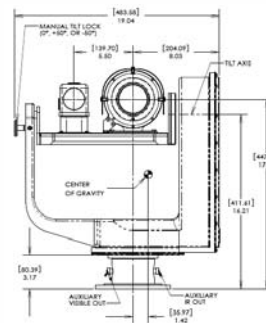
Operating in the 3–5 μ m spectral region, the EOSS 250DC utilizes advanced cooled photodetector technology in a 320 x 256 InSb, 30 μ m pitch focal plane array, or optionally a 640 x 512, 15 μ m pitch focal plane array for maximum resolution (EOSS 250-S). The EOSS 250DC's optical system, equipped with 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 250DC is self contained in a nitrogen backfilled environmentally sealed enclosure.

The EOSS 250DC's impressive integrated system features a thermal camera and a visible CCTV camera with 26X optical zoom mounted on a 360° pan/tilt base. The available joystick controller operates the system with push button interaction. The system is also available without the visible CCTV camera.

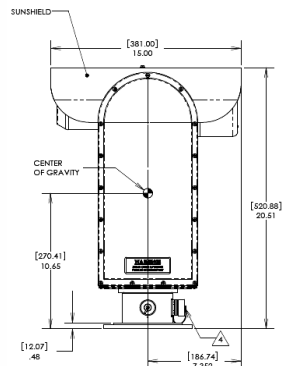
Axsys provides leading-edge IR equipment to the security and surveillance sector. Axsys' proprietary optical designs, state-of-the-art laboratories, and vertically integrated manufacturing capabilities ensure maximum performance and dependability.

Long Range Thermal Imaging System Features Include:

- Auto & Manual Focus
- High Sensitivity Mode
- Dry Nitrogen Backfilled
- Multiple Color Palettes
- Integrated Pan/Tilt Mounting
- 11.0° and 2.2° Dual Fields of View (50/250mm)
- Integrated Controller and Joystick
- Cooled 3–5 μ m IR Detector Technology
- Boresighted CCTV with 26X Zoom for Visible Detection



EOSS 250DC Front View



EOSS 250DC Side View



EOSS 250DC System Specifications

Axsys Part Number	22942 (includes Visible Camera), 23023 (less Visible Camera).
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 of View and Focus Slaving: Visual/Thermal Field of View Switching. Focus (Auto/Manual). Auto Scan with 10 tables of 10 user-defined presets, variable speed, dwell, and camera selection.
Weight	<60 lbs.(27.2kg)(Pan/tilt head & sensors).

Pan/Tilt Head

Pan	360° Continuous.
Tilt	+60°.
Accuracy	0.05°.
Repeatability	0.01°.
Position Rate	Pan < 0.01° to >300°/second. Tilt < 0.01° to >300°/second.

Thermal Camera Characteristics

EOSS 250 Detector	320 x 256 InSb, FPA 30µm pitch.
EOSS 250-S Detector	640 x 512 InSb, FPA 15µm pitch (add "Z" suffix to part number; see table below).
Spectral Band Type	3-5µm. Motorized Remote Focus & Dual Field of View (50/250mm) Optical System.
f/#	4.
Field of View	11.0° x 8.2° (Wide) 2.2° x 1.65° (Narrow)
Controls/Features	<ul style="list-style-type: none"> High Sensitivity Mode. Multiple Color Palettes. Inverse Polarity.

Visible Camera Characteristics (CCTV)

Sensor	1/4" 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 (TV lines)	470 NTSC (460 PAL).
Min. Illumination	< 2.0 lux (1/60 sec), 0.05 lux (1/4 sec).
Signal to Noise	> 50dB.

Construction of Axsys Part Numbers

Note: To construct Part Numbers start with base code, add other desired options alphabetically (excepting that "P" must be last), and then add kit designator. Example: 22942HJ1ZP-600

Code	Feature Referenced & Available Options	Example (sample part number plus code)
-600	EOSS kit with monitor and reel in case	22942-600
-601	EOSS kit, less monitor or reel in case	22942-601
-602	EOSS kit with no support accessories	22942-602
-603	EOSS kit, NEMA rated DCU with AC and DC cable added	22942-603
H	IP over IEEE 802.3	22942H-600
H1	IP over IEEE 802.3; IPv6 Compliant; H.264 Video Compression	22942H1-600
J	Electronic Video Stabilizer Option	
J1	Gyro Stabilized Pan/Tilt Option	22942J1-600
J2	Video Stabilization and Gyro Stabilization Option	22942J2-600
L	Laser Illuminator/Pointer Option	22942L-600
P	PAL Video Format	22942P-602
Vnn	Paint Version (see 12792 paint specification)	22942V4-600
Yn	Laser Rangefinder Option	
Y1	20km, 1.0mRad	22942Y1-600
Y2	20km, 0.5mRad	22942Y2-600
Y3	30km, 0.5mRad	22942Y3-600
Z	640 X 480 Sensor Option	22942Z-600



AXSYS TECHNOLOGIES, IR SYSTEMS, INC.
44 SIMON STREET • NASHUA, NH 03060 • USA
+1.603.521.9300 • FAX: +1.603.521.9375
www.axsys.com

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.



DS002-0209