



EOSS 500CZC
EOSS 500CZC-S
Continuous Zoom

EOSS 500CZC

Long Range
Thermal Imaging System

Features | Benefits

Key Features

- Auto and manual focus
- 100-500mm (5x) continuous field-of-view optical zoom
- Integrated precision pan and tilt system
- 320 x 256 InSb, 30 μ m pitch focal plane array or optional 640 x 512, 15 μ m pitch focal plane array
- Multiple defined user presets
- Boresighted visible camera with 26x zoom

Key Benefits

- Extremely versatile solution for wide range of surveillance applications
- Highly reliable operation with thousands of hours of proven field experience
- Superior Axsys infrared optics for unmatched image quality
- Effectively operates in harsh environments

The Axsys EOSS 500CZC continuous zoom (100-500mm) cooled infrared camera sets a worldwide standard for mobile and stationary long range thermal imaging for surveillance, reconnaissance, and targeting applications.

The EOSS 500CZC is a cost-effective and highly reliable EO/IR imaging system that is used in a variety of land- and marine-based applications such as deterring piracy in the Straits of Malacca, securing borders, airports and ports of entry, and protecting critical infrastructure from unwanted threats.

Operating in the 3-5 μ m spectral region, the EOSS 500 utilizes advanced cooled sensor technology in a 320 x 256, 30 μ m pitch focal plane array, or an optional 640 x 512, 15 μ m pitch focal plane array for maximum resolution (EOSS 500-S). The system is equipped with an automatically controlled defroster and protected with Axsys' proprietary diamond-like hard carbon coating designed to withstand the harshest of conditions. The EOSS 500 also includes a bore-sighted, 26X optical zoom CCTV and an Axsys APS 50 precision pan and tilt system.



System Specifications

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 & Tilt speed controls Field of View & Focus Slaving: Visual/Thermal Zoom Focus (Auto/Manual) Auto Scan with 10 tables of 10 userdefined presets, variable speed, dwell, and camera selection
Weight	~65 lbs (29kg) (Pan/tilt head & sensors)

Thermal Camera Characteristics

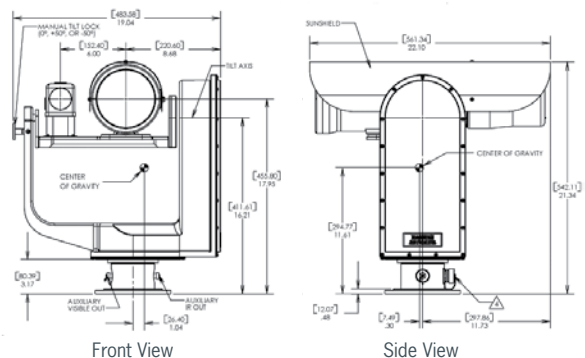
EOSS 500 Detector	320 x 256 InSb, FPA 30µm pitch
EOSS 500-S Detector	640 x 512 InSb, FPA 15µm pitch
Spectral Band	3-5µm
Type	Motorized Remote Focus & Continuous Zoom (100-500mm) Optical System
f/#	4
Field of View	5.5° x 4.1°(Wide) to 1.1° x 0.8° (Narrow), continuous zoom
Controls/Features	<ul style="list-style-type: none"> High Sensitivity Mode Multiple Color Palettes Inverse Polarity

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

Visible Camera Characteristics (CCTV)

	Short Range	Long Range
Sensor	1/4" IT CCD (Super HAD)	1/3" IT CCD
	Approx. 630k Pixels (NTSC)	380k Pixels (NTSC)
	Approx. 740k Pixels (PAL)	440k Pixels (PAL)
FOV (cont optical zoom)	42° to 1.6°	26.8° to 0.9°
Optical Zoom	26X	30X
Digital Zoom	12X	10X
Resolution (TV lines)	470 NTSC/460 PAL	560 color, 700 B/W
Min. Illumination	<2.0 lux (1/60 sec)	<0.2lux, f/1.2 color
	<0.05 lux (1/4 sec)	<0.01lux, f/1.2 B/W
Signal to Noise	>50dB	>50dB



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