

EOSS 825-S-CZC

Ultra Long Range Thermal Imaging Camera

www.axsys.com



Axsys' EOSS 825 systems offer a highly versatile and reliable Continuous Zoom long-range thermal solution, providing mobile and stationary security. Incorporating a rugged camera with extensive detection capabilities and a remarkable 10X continuous optical zoom, the EOSS 825CZC combines impressive performance with Axsys reliability and ease of use.

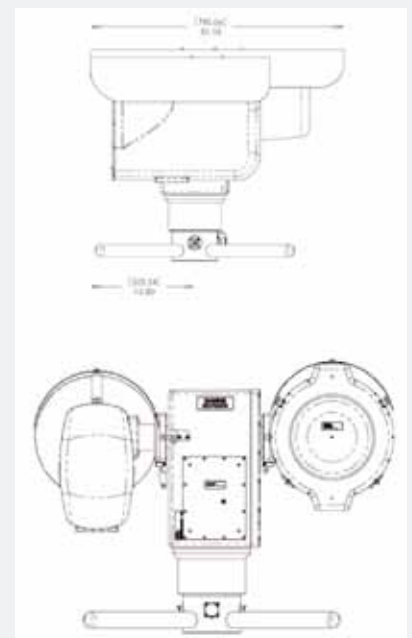
The EOSS 825 thermal imager operates in the 3-5 μ m spectral region, incorporating advanced cooled photodetector technology in a 640 x 512 InSb, 15 μ m pitch focal plane array for maximum resolution. Axsys' proven proprietary environmentally sealed, nitrogen backfilled enclosure ensures simple secure installation and stability over variable temperatures and conditions. Remotely controlled and user friendly, the 825 system is ready out of the box for plug and play operation.

The unit ships with an integrated thermal imager and long range visible CCTV camera mounted on a 360° pan/tilt base. System power supply and integrated controller are housed in a rack mountable enclosure. Control is available through a user-friendly joystick or through a PC via an RS232/422 link.

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.

KEY FEATURES

- Auto and Manual Focus
- High Sensitivity Mode
- Dry Nitrogen Backfilled
- Optional Laser Rangefinder
- Integrated Pan/Tilt Mounting
- Integrated Controller and Joystick
- 10X Continuous Optical Zoom 6.7° to 0.67° (82mm to 825mm)
- Cooled 3-5 μ m IR Detector Technology
- Visible Camera with Long Range 60X Optical Zoom



EOSS 825-S-CZC

System Specifications

Axsys Part Number	23181-60x
Protocols	Axsys/TASS/Pelco-D
Video Format	NTSC / PAL/ Differential
Serial Interface	RS-422
Power Requirements	18-28VDC (direct to P/T), 100-240VAC or 12VDC (with DCU)
Environmental	Unit sealed and dry nitrogen backfilled Front Element Defroster Operating Temperature Range: -32°C to +60°C. Non-Operating Temperature Range: -40°C to +71°C.
Controls	Controls available on a handheld 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 Zoom control Focus (Auto/Manual) Auto Scan with 10 tables of 10 userdefined presets, variable speed, dwell, and camera selection
Weight	~170 lbs.(77kg)(Pan/tilt head & sensors)

Pan/Tilt Head

Pan	360° Continuous
Tilt	+60°
Accuracy	0.05°
Repeatability	0.1°
Position Rate	Pan < 0.01° to >120°/second Tilt < 0.01° to >120°/second

Thermal Camera Characteristics

EOSS 500 Detector	640 x 512 Cooled InSb, FPA, 15µm pitch
Spectral Band	3-5µm.
Type	Motorized Remote Focus and Continuous Zoom Optical System
f/#	3.3
Field of View	6.7° x 5.0° Wide to 0.67° x 0.50° Narrow
Controls/Features	Multiple Color Palettes Inverse Polarity

Visible Camera Characteristics (CCTV)

Sensor	1/3" IT CCD
	Approx.: 380k Pixels (NTSC)
	Approx.: 440k Pixels (PAL)
FOV (cont optical zoom)	11.0° to 0.18°
Optical Zoom	60X
Digital Zoom	10X
Resolution (TV lines)	560 color/700 B/W
Min. Illumination	<0.2 lux f/1.2 color <0.01 lux f/1.2 B/W
Signal to Noise	>50dB

Construction of Axsys Part Numbers

Code	Feature Referenced & Available Options	Example (part # plus code)
-600	EOSS kit with monitor and reel in case	23181-600
-601	EOSS kit, less monitor or reel in case	23181-601
-602	EOSS kit with no support accessories	23181-602
-603	EOSS kit, NEMA rated DCU with AC and DC cable added	23181-603
F2	Fujinon 12.5-1500 Lens; Samsung Low Light Camera, "Long Range"	23181F2-600
H	IP over IEEE 802.3	23181H-600
H1	IP over IEEE 802.3; IPv6 Compliant; H.264 Video Compression	23181H1-600
J1	Gyro Stabilized Pan/Tilt Option	23181J1-600
J2	Video Stabilization and Gyro Stabilization Option	23181J2-600
L	Laser Illuminator/Pointer Option	23181L-600
P	PAL Video Format	23181P-602
Vnn	Paint Version (see 12792 paint specification)	23181V4-600
Yn	Laser Rangefinder Option	
Y1	20km, 1.0 mRad	23181Y1-600
Y2	20km, 0.5 mRad	23181Y2-600
Y3	30km, 0.5 mRad	23181Y3-600

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: 23181F2H1ZP-600