

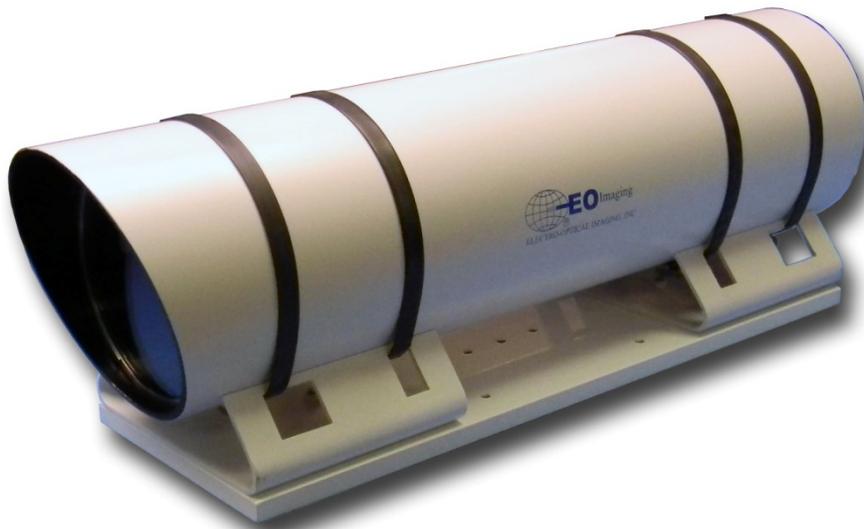


## **MODEL 901**

### **ENVIRONMENTALLY RUGGEDIZED 35X CAMERA/LENS SYSTEM**

E-O Imaging's camera/lens enclosures are designed to provide a reliable and cost effective solution for protecting camera/lens assemblies from the effects of temperature, shock, vibration and airborne contaminants. The camera/lens assembly is a totally integrated package containing a camera/lens power supply, heaters and boresight adjustment. The boresight adjustment ensures the lens' boresight shift is held to a nominal 0.5 mr over the full zoom range, a critical parameter for precision tracking applications. The integrated assembly is then placed into the enclosure, which is then sealed and pressurized with dry nitrogen or air to keep out moisture and airborne contaminants. A sunshield is provided to minimize the effects of direct sunlight, allowing the system to operate at higher ambient temperatures.

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### **WHY USE AN ENCLOSURE?**

- Environmental enclosures protect the user's sensor system from the effects of temperature, moisture and airborne contaminants by providing a controlled environment for operation. By providing a controlled environment, the long-term reliability of the camera/lens assembly is enhanced.
- Enclosures will also retard degradation to the lens coating due to airborne contaminants. Unsealed systems allow contaminants to accumulate on the lens surface degrading image quality over time.
- E-O Imaging's environmental enclosures offer automatic heaters to ensure reliable camera operation in cold environments below 25°C.
- The use of an environmental enclosure provides a means of ruggedizing the lens/camera assembly against the effects of shock and vibration during transportation and use.
- Another benefit of the factory sealed and pressurized housing is the assurance of a properly-aligned camera and lens. All dust and debris is cleared from the optical path providing a blemish-free image.
- The camera/lens assembly is delivered as a fully integrated assembly, ready to install.

### ***Engineering High Performance Tracking Solutions***

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# MODEL 901

## ENVIRONMENTALLY RUGGEDIZED 35X CAMERA/LENS SYSTEM

### SPECIFICATIONS

#### Enclosure

Length:	22 inches (24 inches with sunshield installed)
Diameter:	7 inches
Total Weight:	35 pounds (with mounting plate installed)
Heaters:	Two (2) 40W automatic heaters
Operating Temperature:	-35°C to +60°C
Pressurized:	Dry nitrogen with pressure relief valve (2-5 pounds nominal)

#### Interface

Connector Type:	KPT07E20-16P
Input Voltage:	85-265V AC, 47-440Hz
Camera/Lens Control:	RS-232/422 serial
Video Output:	75ohm coax

#### Camera (typical)

Format:	½" interline transfer CCD, low light level, extended near-IR sensitivity, RS-170 or CCIR
Pixels:	RS-170 at 768 (H) x 494 (V) CCIR at 752 (H) x 582 (V)
Sensitivity:	0.004 lux at full video, max gain, AGC off 0.003 lux at 80% video, max gain, AGC off
Sync:	Internal Crystal

#### Lens

Type:	35X continuously variable zoom (20mm to 700mm)
Focus Range:	1.5 meters to infinity
Flange Focus:	17.5 millimeters
Free Aperture:	70 millimeters Constant aperture from WA to 80% of max telephoto, gradual increase thereafter to 10% above specified
Iris:	Auto/Manual
Boresight:	Less than 0.5 milliradian drift through zoom range
f# Range:	f3.0 - f8.0

#### Field of View

	Wide FOV	Narrow FOV
Standard:	~18.6 degrees	~0.52 degrees



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*Specifications subject to change without notice. Consult Factory for latest specification and available options.*