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 contaminates. 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 contaminates. A sunshield is provided to minimize the effects of direct sunlight, allowing the system to operate at higher ambient temperatures.

**Why Use an Enclosure?**

- Environmental enclosures protect the user’s sensor system from the effects of temperature, moisture and airborne contaminates 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 contaminates. Unsealed systems allow contaminates 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.
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
Storage Temperature: -35°C to +75°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
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

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