



Series 66 Miniature EO/IR PAYLOADS

Revolutionary new daylight TV and IR payloads are based on a new BAI-developed belt-drive pan and tilt gimbal mechanism that enables construction of a compact, fully-integrated unit **weighing less than 3.5 pounds!** Gimbal features continuous 360-degree panning rotation through use of a sealed electrical slip ring. Payload's pan and tilt pointing location is provided through use of precision position encoders. Circuitry is provided to allow input from onboard stabilization sensors



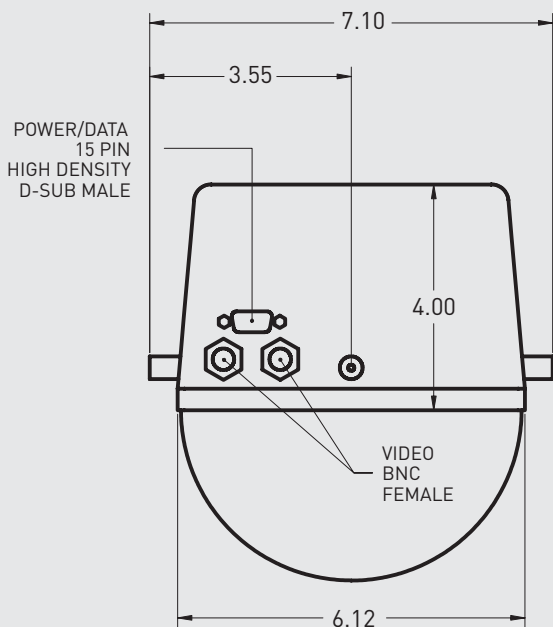
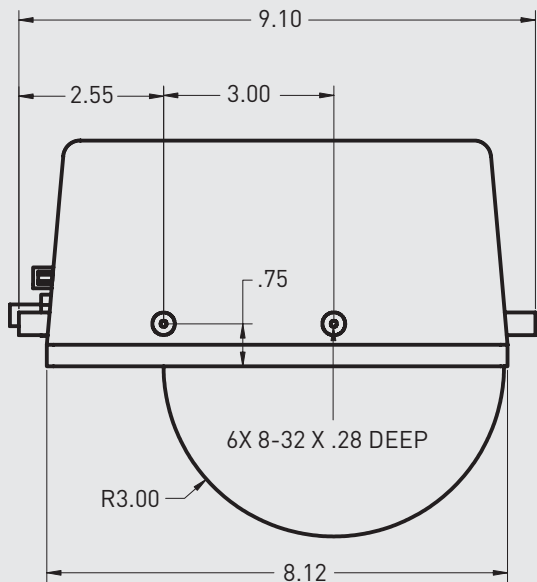
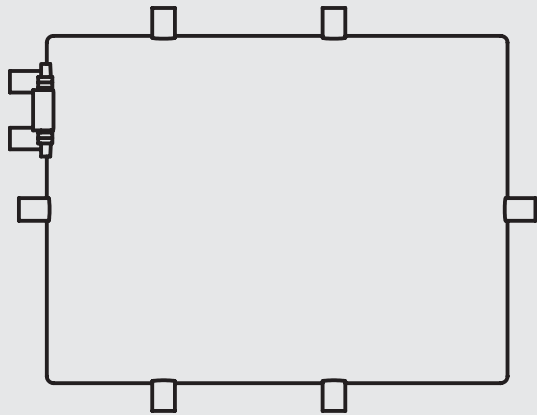
(i.e. IMU.) Small footprint (10" x 6" x 8" L x W x H) allows integration into a broad variety of fixed or rotary-winged systems. Payload installation or change-out is accomplished in minutes using four mechanical fasteners and two electrical connections for power/data (DB-9) and video (BNC). Custom connections and mounting brackets are also available. Serial (RS232) control using proprietary software language is easily integrated with most command and control systems. Both payloads are compatible with BAI's Universal Payload Controller for control by hard-wire or via common wireless serial links. A connection for hard-wire control is included standard on each unit. Payloads are weather-resistant for many uses.

- RS-232 Serial Control
- Continuous 360° Pan Motion
- 12 and 24-Volt Versions Available
- Small Footprint
- Weighs Less Than 3.5 lbs!
- Gyro Stabilization Optional



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Dimensions in inches

SPECIFICATIONS

Payload functions include the following (varies with sensor type:)

- Pan Left/Right (360 continuous)
- Focus Near/Far
- IR Contrast Up/Down
- Tilt Up/Down (0-90)
- Auto-Focus On/Off
- IR Gain Up/Down
- Zoom In/Out (TV only)
- Pilot/Stow Position
- IR Polarity White/Black

Sensors Currently Available

- SONY EVI Electronically-Stabilized TV
- or Indigo "Omega" IR

Weight/Dimensions

3 lbs (varies with sensor type), 10" x 6" x 8" (L x W x H)

Power Requirements

12-Volts (24-Volts optional), 1.5 Amperes Maximum

Video Format

RS-170 (Standard Video, 12-Volts Peak-to-Peak)

Command Data Format

Serial RS-232 (BAI Proprietary packet format)

Other

Compatible with BAI Universal Payload Controller



Payload Controller

Cleared by DoD/OFOISR for public release under 05-S-2351 on 11.14.05.



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