

# ABS – Airborne Bispectral Scanner



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## VENDOR DESCRIPTION

The ABS is a dual optical port, bispectral scanner consisting of a compact scan head with one or two detectors, and an electronics package that mounts in a 19" rack assembly. The scan head and electronics can be installed in a wide range of aircraft using standard 16" aerial camera ports and seat assemblies.

The ABS delivers 12-bit digital precision and broad dynamic range with interchangeable detectors for a wide range of applications, plus continuous video monitoring and operator control via a menu-driven touch screen.

Industry-standard 8mm digital tape recording makes the ABS even easier to adapt to your remote sensing needs. Data can be directly transferred to PC-based image processors. The system performs simultaneous scanning for thermal infrared and a second spectral region: either short-wave infrared, visible/near infrared, or ultraviolet. Bandpass filters can be used to obtain specific spectral bands in the V/NIR (0.4 - 1.1  $\mu\text{m}$ ) region. Calibration of the thermal IR channel is standard and uses the built-in blackbody references.

The system's built-in test (BIT) capabilities deliver a high level of confidence in mission success. An on-board image display provides a real-time check of flight line coverage and data quality. A built-in differential ready CPS receiver automatically inserts navigation data into the housekeeping message in the header of each scan line.

The ABS provides all this, and much more, within the price range of private survey companies, institutions, and government agencies with budget constraints.

The ABS collects data for applications as diverse as:

- *geologic mapping*
- *vegetation studies*
- *pollution monitoring*
- *maritime surveillance*
- *heat loss detection*
- *and many more*



- **Digital Performance 8-bit and 12-bit resolution**
- **Two channel scanning thermal IR plus your choice of one of three alternate bands**

### Product Manager Robotic & Unmanned Sensors

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Business Category: Small Business

EOIR

Hardware
Power: 500 watts
Weight: 84 kg or 185 lbs
Dimensions: 700mm x 500mm x 500mm
Cooling: Ambient air
LOS Stabilization: Gyroscope
Operating Altitude: 1200 ft to 50K ft AGL
Operating Speed: 100 knots to 400 knots
Operating Temp.: -55°C to 70°C

Electro-Optical (EO)	Infrared (IR)
Type: Line Scanner	Type: InSb / MCT Detector
Resolution: 0.6 mrad	Resolution: 2.5 or 1.25 mrad
Angular Coverage: 90°	Angular Coverage: 90°
Field of View: 90°	Cooling Method: LN2 or cryostat
Sensitivity: NETD < 0.2°C	