

AMS – Airborne Multispectral Scanner



Date Revised: 28 JAN 2004

VENDOR DESCRIPTION

The AMS system is a dual optical port multispectral scanner which simultaneously records up to six spectral channels directly onto 8mm digital tape. The AMS provides calibrated thermal information for the determination of radiometric temperature relationships for various remote sensing applications. The compact scan head and electronics can be installed in a wide range of aircraft using standard 16" aerial camera ports and seat assemblies.

The standard sensor configuration offers a dual-element thermal infrared detector and an 8-channel visible/near-infrared spectrometer so that a total of 10 spectral bands are available. Up to six of these bands may be selected for recording by the operator. An ultraviolet detector/dichroic assembly may be substituted for the spectrometer to expand system capabilities.

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 GPS receiver automatically inserts navigation data into the housekeeping message in the header of each scan line.

The AMS provides operator control via a menu-driven touch screen. An optional printer can provide continuous real-time hard copy images. In addition, a VHS video recording can be made from the monitor output.

AMS data tapes may be read and processed by ERDAS Imagine® image processing software, using the "Daedalus" importer.

The AMS collects data for applications as diverse as:

- ▣ *geologic mapping*
- ▣ *forest inventory*
- ▣ *fire mapping*
- ▣ *oil spill detection/mapping*
- ▣ *water chlorophyll studies*
- ▣ *and many more.*



- **Digital performance—8-bit and 12-bit resolution**
- **Ten spectral channels**

Product Manager Robotic & Unmanned Sensors
 Telephone: (732) 427-5827 / DSN 987
 Fax: (732) 427-5072 / DSN 987
 e-mail: SFAE-IEWS-NV-RUS@IEWS.monmouth.army.mil



Business Category: Small Business

MS

Hardware	Performance
Power: 500 watts	Swath Width: 180% @ 1000 ft AGL (proportional to AGL)
Weight: 84 kg or 185 lbs	Sensor Type: Visible = Si; IR = InSb and MCT
Dimensions: 700mm x 500mm x 500mm	On-board Storage Capacity for Continuous Collection for 4 hours
In-Flight Manipulation of the Sensor: Yes	Geolocation Accuracy: 1 meters
Operating Altitude: 1200 ft to 50K ft AGL	Interoperability: None
Operating Speed: 100 to 400 knots	
Operating Temp.: -55°C to 70°C	