

AIRBORNE MEASUREMENT AND TEST PLATFORM



APPLICATIONS

- **AERIAL SCANNING FOR**
 - Geological mapping**
 - Vegetation studies**
 - Pollution monitoring**
 - Maritime surveillance**
 - Heat loss detection**
- **AIRBORNE SPECTRAL PROFILING**
- **THERMAL PROFILE OF AFFLUENCE**
- **ULTRAVIOLET/VISIBLE PROFILING**
- **AIRBORNE TEST-BED**

ADVANCED PHOTONICS INTERNATIONAL, INC. presents an Airborne platform suitable for measurements or as a test-bed to test or evaluate concepts or prototype instrumentation. The aircraft a two engine piper Aztec has been modified to incorporate a 25 inch instrument bay (7 inch deep)The aircraft incorporates standard power suitable to support standard instruments.

The platform can be supplied with free space for your experiment or with a standard measurement package which has multi-spectral imaging from the Ultraviolet to the Infrared. The instrument package can be customized to meet specific requirements or augmented with additional instruments such as a laser line scanner or gamma ray monitor.

Our engineering staff can accomplish the data reduction and analyze to support the measurements desired. In addition our engineering staff can assist in developing new instrumentation or modify existing packages for feasibility tests.

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THE AIRBORNE PLATFORM is an Piper Aztec. It has been configured for measurements as well as a test bed. The aircraft allows easy access to payload area with a clear view of ground targets through payload bay. The aircraft incorporates a 24 inch diameter by 7 inches instrument bay open to the atmosphere. Instruments can be mounted either in this space or to the back plate of bay. The aircraft has rack mounts and power to support instruments



The AIRBORNE PLATFORM can be supplied with a base line measurement capability. The instrument has a total scanned 86 degree field of view. It collects data in the 8 to 12 micron band (Long Wave IR.) and in the 360 to 380 nanometer band (UV). Additional channels can be added to meet specific applications.

SPECIFICATIONS	
AIRCRAFT	Piper AZTEC
ALTITUDE	15,000 ft.
SPEED	90-160 KNOTS
POWER	28 V, DC, 110V, AC, 600W
INSTRUMENT BEY	24 Inch Diameter 7 inches deep

The Measurement platform can be supplied with payload bay free for mounting of your equipment or supplied with measurement equipment of your choice. The following chart details some of the equipment that can be supplied with the equipment. Our engineering staff is available to assist you in installing your equipment and help you with your possible data collection and reduction needs.

INSTRUMENT PACKAGES	
IMAGERS	IR, VIS, UV
SCANNERS	Laser
SENSORS	IR, Gamma
SPECTRAL	Hyperspectral
SOUNDERS	Infrared

SPECIFICATION	
CHANNELS	8-12 microns 360-380 NM 6 optional channel available
FIELD OF VIEW	2.5 Mils; Optional 1.25, 5 mils
TOTAL FOV	86 Degrees
PIXELS	720 @ 2. Mil; 1440 at 1.25 mil
SCAN RATES	100, 50, 25, 12.5, 6.25 SCAN/Sec; operator controlled
V?H	.25 rad/sec @ 100 scan@ 2.5 mils .125 rad/sec@ 1.25 mils
ROLL CORRECTION	+/- 15 Degrees automatic
DIGITALIZATION	12, 8 BIT SELECTABLE

API engineering staff has many years of experience in developing Remote Sensing Instrumentation, please feel free to discuss new instruments needs.