



**RADIATION
SOLUTIONS INC**

RS-530 UAV-Mounted Spectrometer System

APPLICATIONS



FEATURES

Ruggedized Detector

- 3" x 3" NaI Crystal
- Low Power Computer Processing Unit (CPU) Board
- Imbedded GPS Receiver (12 Channel)

RSI Proprietary Advanced Digital Spectrometer (ADS)

- Automatic and continuous stabilization on NORM

Weight

- 6.6 lbs (3 kg)

Connectability

- Wi-Fi, Wireless Connectivity, Ethernet, USB download

Data Acquisition

- Records K, U, Th data & full spectrum
- Stores 24 hours of data
- Allows for numerous data file formats
- NASVD and altitude corrections embedded in the data analysis software

Software and App

- RadAssist
- MapAssist

Adaptable

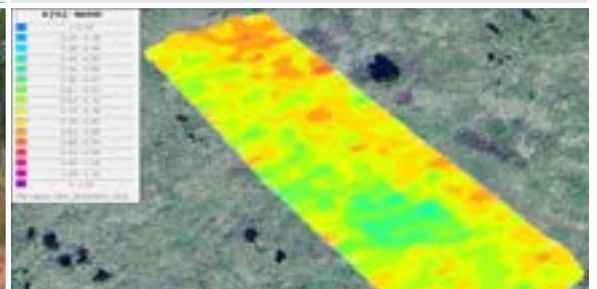
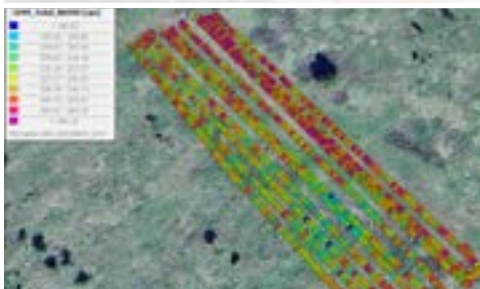
- Interoperable with all RSI software
- Universal mounting system permits flexibility in UAV model



UAV-Mounted Radiation Detection System

Compact and Lightweight for Mineral and Environmental Investigation

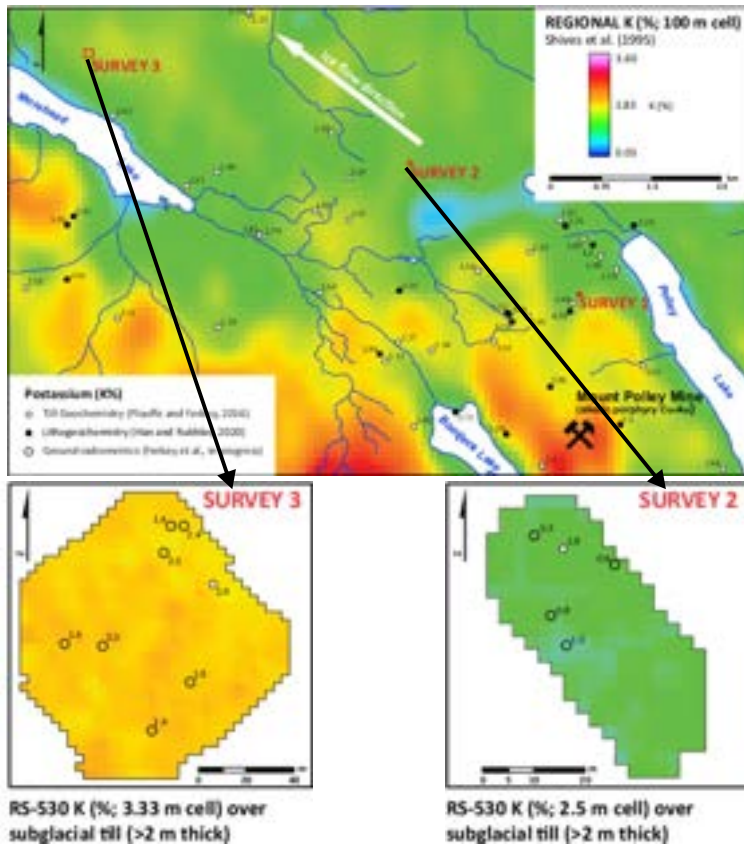
Radiation Solutions' UAV-Mounted Spectrometer System (RS-530) offers a smaller, lighter, economical solution designed for use on UAVs with smaller payloads. The RS-530 utilizes a 3" x 3" (0.39L) NaI(Tl) detector and spectrometer assembly weighing only 3 kg (6.6 lbs). It is designed for mapping near-surface expressions of bedrock lithologies and can be combined with a magnetometer or other instrumentation.



RS-530 UAV-Mounted Spectrometer System

Analysis can be conducted in the field using RadAssist software to obtain K, U, and Th concentrations. Altitude corrections and noise removal (NASVD) are embedded in this software with various export formats.

Extensive data acquisition efforts using the RS-530 showed strong correlations with historical data.



*Data courtesy of British Columbia Geological Survey

Large 3" x 3" NaI(Tl) Crystal

Energy Range

- 12keV - 3MeV

Energy Resolution

- typically <7.5%

Auto-Stabilizing on Naturally Occurring Radioelements

Power Input

- 115-220 VAC, 10-36 VDC

GPS

- Imbedded GPS Receiver (12 channel)

Software

- RadAssist
- MapAssist

Operating Temperature

- -40°C to +50°C / -40°F to +122°F

Storage Temperature

- -50°C to +50°C / -68°F to +122°F

Humidity

- 100% non-condensing

Radiation Solutions Inc.

Radiation Solutions Inc. (RSI) is a Canadian company specializing in nuclear instrumentation for the detection, measurement and analysis of low-level ionizing radiation from both naturally occurring and man-made sources.

RSI's industry-leading radiation detection technology incorporates a fully digital system design, spectral analysis, and advanced data processing. RSI deploys this technology in stationary systems, airborne and mobile systems, portable and handheld spectrometers. This provides a level of quality previously only attainable in laboratory equipment.

RSI is committed to working closely with customers in all aspects of the product life cycle including product requirement, application, training, support, and product enhancement. Our comprehensive approach results in state-of-the-art hardware components, and software that produce outstanding results exceeding expectations.



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