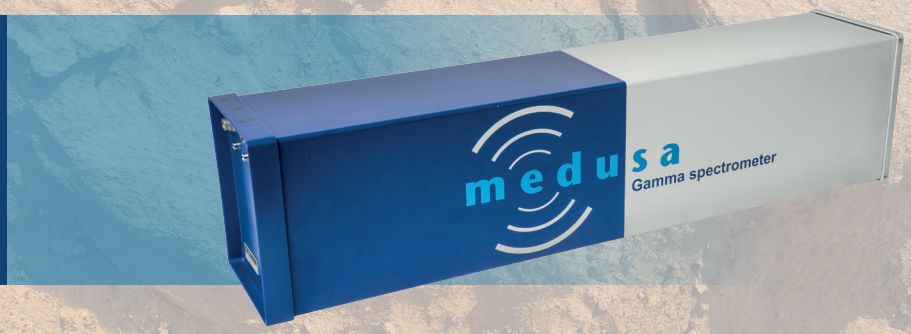
air-borne

MS-4000



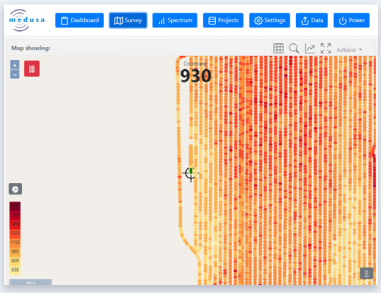
The Medusa Radiometrics MS-4000 'Airborne' gamma-radiation detection system (AGRS) is our 'classic' lightweight radiation sensor, first introduced in 2006 for a large regional uranium survey in Madagascar. Since then, this system has been utilized worldwide for mineral exploration and remediation surveys. Key customers include geophysical survey companies, geotechnical consultants, and research institutes, which use this sensor in small airplanes or helicopters.

Sensor key features

- 27 kg, easy to integrate in airplanes and helicopters
- Ultra rugged 4000 ml CsI scintillator crystal
- Optimized for ease of use
- Integrated data storage and processing
- Life-long feature updates

Typical applications

- Air-borne measurements
- Integrated in vehicles
- NORM characterization
- Mineral mapping



'A uniform interface for all our sensors'

Medusa Detector Operating System (mDOS)

Whether doing an airborne survey, locating a lost source with a UAV, or using our detector for a hand-held survey for mapping the environment, you can count on using the same familiar interface.

mDOS is developed for in-the-field usage. Optimized for real-time monitoring, ease of use and automating your survey workflow.

About Medusa Radiometrics

- Scientific collaboration with eminent research institutes and peer-reviewed publications of the analysis procedures
- We have over 20 years of experience in developing gamma–ray spectrometers and their applications
- We help you to develop your business by delivering state of the art gamma-ray spectrometer solutions, tailored to your needs
- We don't sell, we deliver. Our support is excellent and worldwide. You can count on us, wherever you are
- We share our knowledge and expertise through scientific publications, whitepapers, tutorials, and case studies

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MS-4000 Technical specifications

Recommended application: air-borne

Our high-speed, high resolution sensor suited for exploration and mapping

Gamma-ray spectrometer

Scintillation crystal	4x4x16” (4000 ml) CsI
Typical mapping speed	Up to 90 km/h
Recording frequency	Up to 5 hz
Radionuclide analysis	^{40}K, ^{238}U, ^{232}Th and ^{137}Cs

Electrical

Input voltage	12 - 35 V
Power consumption	3 W (average), 6 W (max)
Battery	Car battery

GPS

Type	uBlox ZED-F9P
Accuracy	1.5 m CEP
RTK accuracy	<1 cm
Signals	GLONASS, BeiDou, Galileo

Mechanical

Dimension	17(h) x 20(w) 86(l) cm
Weight	27 kg
Operating Temperature	-20 to +65 °C
IP rating	IP65

Connectivity

Wi-Fi	2.4 and 5 Ghz
Ethernet	100 Mbps
Port	RS-232

Data

Format	JSON, NMEA, CSV
Streaming	RS-232, ethernet and Wi-Fi
Sensors	Spectrometer, GPS, PTH
Internal storage	16 GB, 500 hours of data

Included software

Onboard-processing (by mDOS)	Real-time analysis Survey planner Real-time radionuclide inspection Sample measurements
Post-processing (by GammAn)	Full spectrum analysis (FSA) Window analysis (WA)

Support

Online support	Extensive library of support guides
Custom support	Optional

Visit us online at
medusa-radiometrics.com

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