

gSMS-100



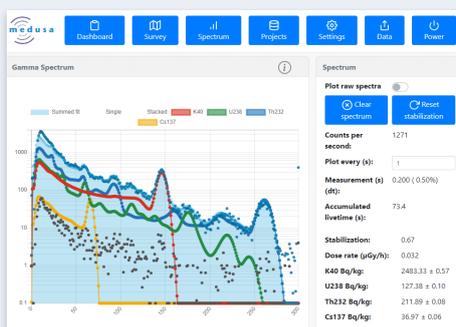
The Medusa Gamma Soil Moisture Sensor (gSMS) is a stationary sensor that continuously records radionuclide concentrations in the area. The sensor can be placed in remote locations and is powered by a solar panel. The gSMS stores data locally and uploads its radionuclide concentrations to an online platform, where they can be inspected and downloaded for further processing. This real-time data can be used for environmental moisture monitoring projects, or for tracking radiation levels in security applications

Sensor key features

- 1.5 kg, our smallest sensor
- Ultra rugged 100 ml CsI scintillator crystal
- Optimized for ease of use
- Integrated data storage and processing
- Life-long feature updates

Typical applications

- Stationary measurements
- NORM characterization
- Soil moisture determination



'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

gSMS-100 Technical specifications

Recommended application: stationary

Gamma-ray spectrometer

Scintillation crystal	2x2" (100 ml) CsI
Typical mapping speed	Up to 10 km/h
Recording frequency	Up to 5 hz
Radionuclide analysis	⁴⁰ K, ²³⁸ U, ²³² Th and ¹³⁷ Cs

Electrical

Input voltage	5 - 35 V
Power consumption	3 W (average), 6 W (max)
Power source	Solar powered (optional)

GPS

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

Mechanical

Dimension	80 (Ø) x 250(L) mm
Weight	1.5 kg
Operating Temperature	-20 to +65 °C
IP rating	IP67

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, 700+ days of data

Included software

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

Support

Online support	Extensive library of support guides
Custom support	Optional

Designed for
stationary, long
term outdoor
measurements



Visit us online at
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