



HERMES CsI

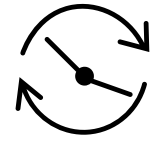
GAMMA-RAY SOIL MOISTURE SENSOR



Wide range of detectors and configurations



Rugged portable case for outdoor applications



Real-time radioisotope identification

Detector: CsI(Tl) with MCA

Rugged, high-protection case with foam filling

Customisable dimensions, connections and equipment

Integrated GPS, LAN, WiFi, 4G

Touch-screen panel PC with intuitive user interface SW

HERMES CsI is designed to monitor a soil portion (i.e. footprint) in order to acquire gamma ray spectra to evaluate activity concentration of natural and artificial radionuclides, namely K-40, U-238, Th-232 and Cs-137 at natural background level.

HERMES CsI is an autonomous device, including:

- 2"x2" CsI(Tl) detector coupled to PMT
- MCA with HV power supply
- High-performance, low-consumption single board computer
- T, Rh and P sensors
- Router 3G/4G/WiFi/LAN
- Rugged technical case for long-term outdoor use
- HERMES-CsI Software

The device can also be coupled to an accessory solar power system through custom-made mechanical assemblies.

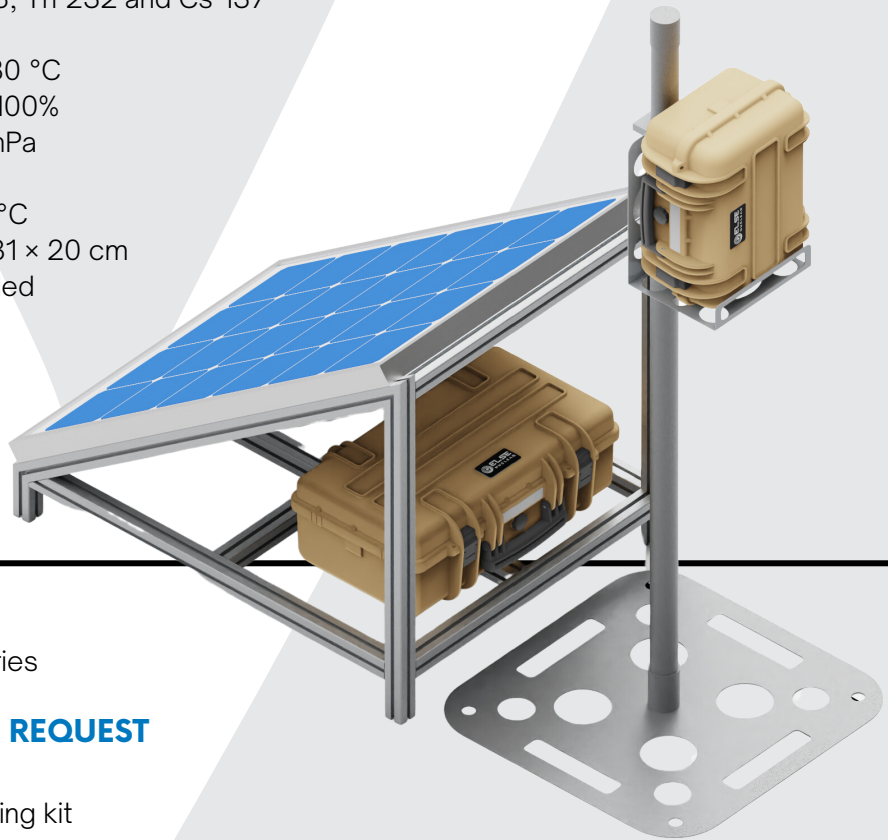
Data is stored in records containing energy-stabilized gamma ray spectra, together with count rate and activity concentration of each nuclide.

Measurement results are given in terms of Bq/g of K-40, U-238 and Th-232, as well as in terms of %K, ppm eU and ppm eTh.

The device is provided factory calibrated in energy.

TECHNICAL SPECIFICATIONS

- 2" x 2" CsI(Tl) detector
- Embedded readout and processing board
- Identified radionuclides: K-40, U-238, Th-232 and Cs-137
- MCA: 1024 channels
- Temperature sensor range: -40 ÷ +80 °C
- Relative humidity sensor range: 0 ÷ 100%
- Pressure sensor range: 800 ÷ 1100 hPa
- Power: Li-Ion / Lead Acid batteries
- Operating temperature: -20°C ÷ 50 °C
- Dimensions (WxLxH): approx. 36 x 31 x 20 cm
- Weight: less than 15 kg, case included
- Protection grade (typical): IP67
- Communication: 3G/4G/WiFi/LAN



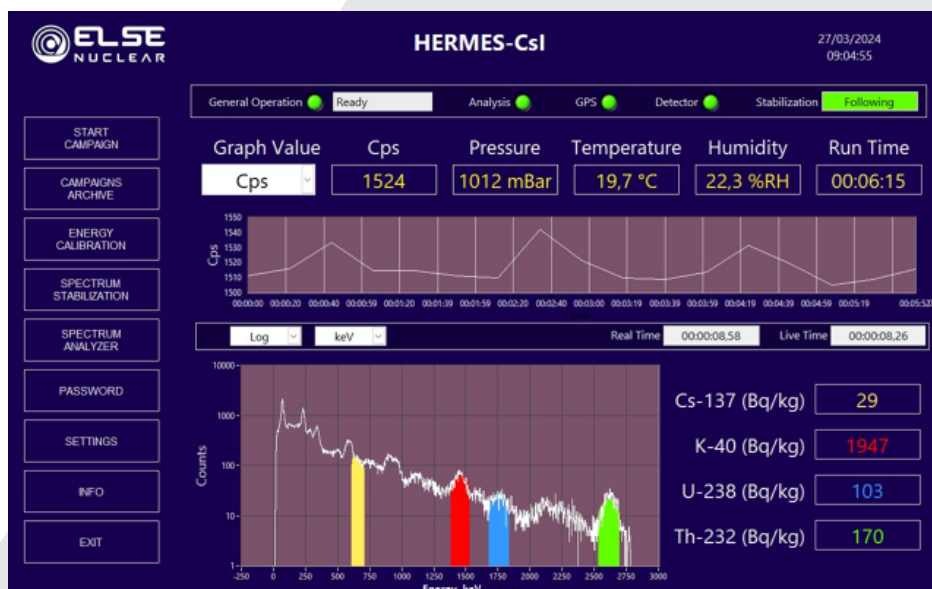
Outdoor long-term mounting kit with solar panel

OPTIONS

- Additional/alternative nuclides libraries

ACCESSORIES AVAILABLE UPON REQUEST

- Vehicle mounting kit
- Outdoor long-term operation mounting kit
- Backpack configuration
- Photovoltaic panel power supply system
- Warranty extension from 12 months to 24 months



HERMES CsI user interface example

