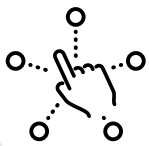




HERMES

MOBILE GAMMA SPECTROMETRY AND SURVEY UNITS



Wide range of detectors
and configurations

Detectors: NaI(Tl) with MCA,
Geiger-Muller, CsI(Tl), plastic

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



Rugged portable case for
outdoor applications



Real-time radioisotope
identification

HERMES systems are rugged, portable, and easily deployable RIID units designed to perform gamma dose rate and spectrometry measurements, for applications such as radiation monitoring, geology research, laboratory analysis, environmental survey.

HERMES product line includes many customisable versions:

- **HERMES NAI** or **CSI**, with NaI(Tl) or CsI(Tl) detector and MCA to perform gamma spectrometry
- **HERMES GM** or **PLAS**, with Geiger-Muller or plastic detector for gamma monitoring
- **HERMES HUB**, collecting data from others HERMES units as an integrated monitoring system

The “HUB” component can be integrated in any HERMES version, in order to provide an all-in-one configuration. This option allows managing a complete network of either complementary monitors (e.g. mobile laboratory), or modular detectors consisting of several interconnected sub-units. All available units feature wall-mounting plates and low voltage supply connection. **HERMES** units can be controlled through LAN or Wi-Fi (smartphone or tablet), thus allowing to operate remotely while the case is closed. The **HERMES** data management and processing software provides dose rate values, nuclide identification and an interactive heat map of the acquired data. The scan results are continuously saved into the local memory for further processing, together with GPS coordinates.

CONFIGURATION EXAMPLE

A representative configuration of HERMES unit is **HERMES NAI**, which includes:

- NaI(Tl) 3"x3" cylindrical scintillator coupled with a SiPM
- Compact built-in analogue and digital electronics, consisting of amplifier, shaping, comparator, ADC and Multichannel Analyser (MCA)
- Tablet computer with touch-screen user interface and proprietary ELSE NUCLEAR control software for data elaboration and storage
- Replaceable Li-Ion Battery, suitable for approx. 8 h operation

All mentioned components are housed in a slim rugged case designed for outdoor use (typical IP grade: IP67, dust and water resistant), which can be easily and comfortably handled by the user.

TECHNICAL SPECIFICATIONS (HERMES NAI)

- Typical resolution at 662 keV (Cs-137): <7.5%
- Energy range: 30 keV ÷ 3 MeV
- Gamma dose rate range: 0.03 μ Sv/h ÷ 10 μ Sv/h
- Identified radionuclides: industrial, natural, medical
- Automatic gain stabilization, continuous GPS coordinates recording
- MCA: 1024 channels
- Power: Li-Ion / Lead Acid batteries
- Operating temperature: -20°C ÷ 50 °C
- Dimensions (WxLxH): 36 × 31 × 20 cm
- Weight: less than 15 kg, case included
- Protection grade: IP67
- Communication: LAN, WiFi, 4G, BT4.0



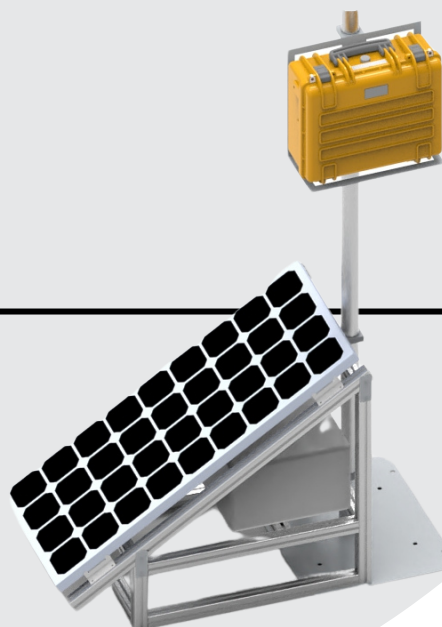
HERMES rugged cases

OPTIONS

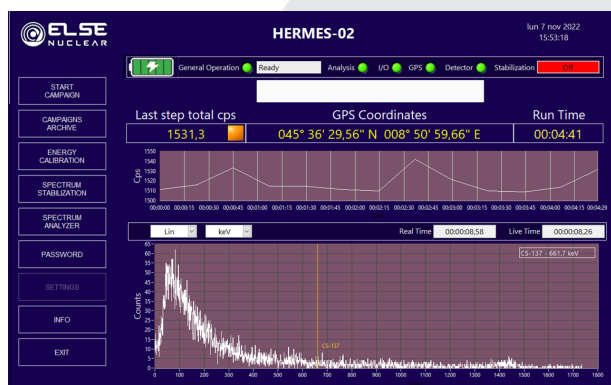
- NAI, CSI, GM, PLAS versions
- All-in-one configuration with integrated HUB component

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



Outdoor long-term installation example



HERMES user interface example

