

NuSAFER Radiological Sensor



Safer allows for reinforced and discreet surveillance of an area in order to detect a possible radiological threat ("dirty bomb"). Wireless, simple and quick to deploy, the Safer has its own secure data transmission network. The Safer can carry single or continuous measurements (definition of time slots, thresholds, etc.). It provides real-time remote feedback to the centralized control station thanks to its high-performance transmission system. Deployed as a network, it allows perimeter monitoring of sensitive installations, monitoring of major events, recurring measurement of hot spots, etc.

Benefits

- Discreet and easy to deploy sensor
- Measure and alert in real-time
- Long-range wireless communication
- Distant customization of thresholds and parameters
- GNSS or manual localization
- Ultra long autonomy on a single cell battery
- Data history and traceability
- Place & forget sensors

Key figures

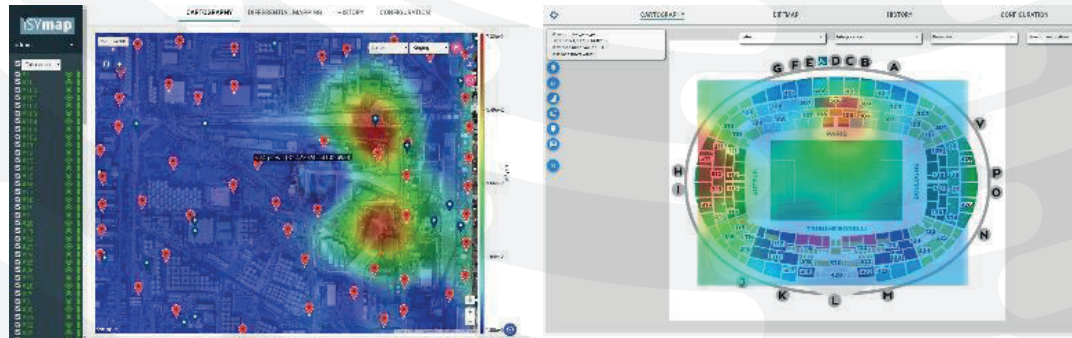
10 years
 ➔ *Up to 10 years autonomy*

10 nGy/h
 ➔ *From 10 nGy/h dose rate*

100 mGy/h
 ➔ *To 100 mGy/h*

Applications

- Deployment of sensors network for enhanced surveillance.
- Automatic measurement of recurring checkpoints.
- Zoning monitoring for storage areas, zone boundaries or even site fences.



Environmental surveillance

Stadium survey

Dose rate

	GM	DR-L
Sensor	Geiger-Müller energy compensated	CsI (TI)
Emitter	Gamma	Gamma
Measure unit	Sv.h-1 or Gy.h-1	Sv.h-1 or Gy.h-1
Measure range	100 nGy.h-1 to 100 mGy.h-1	10 nGy.h-1 to 10 mGy.h-1
Efficiency	1.25 c/s/μGy/h	1.7 c/s/μGy/h
Energy range	59 keV to 2 MeV	59 keV to 2 MeV
Autonomy	5 to 10 years	6 months to 10 years

Technical Specifications

ELECTRICAL DATA

- Battery: Single 6LR61

MECHANICAL DATA

- Ingress protection: IP64
- Dimensions: 150 (L) x 90 (l) x 30 (H) mm
- Weight: 300g

INTERFACES

- On device: Battery level & power management
- Display: PC monitoring
- Android device (smartphone, tablet, smartwatch, etc.)

COMMUNICATION

- Name: iCOM
- Long-range communication: LoRa (868 MHz), 4G LTE, 5G ready
- Short-range communication: BLE
- Security: AES-256 / RSA-1024
- Localization: GNSS (GPS, BeiDou, Galileo, GLONASS) (+/-3m)

ENVIRONMENT

- Functional temperature: -20°C to +60°C
- Storage temperature: -20°C to +60°C

STANDARDS

- Conform to CE RED Directive (2014 /UE)