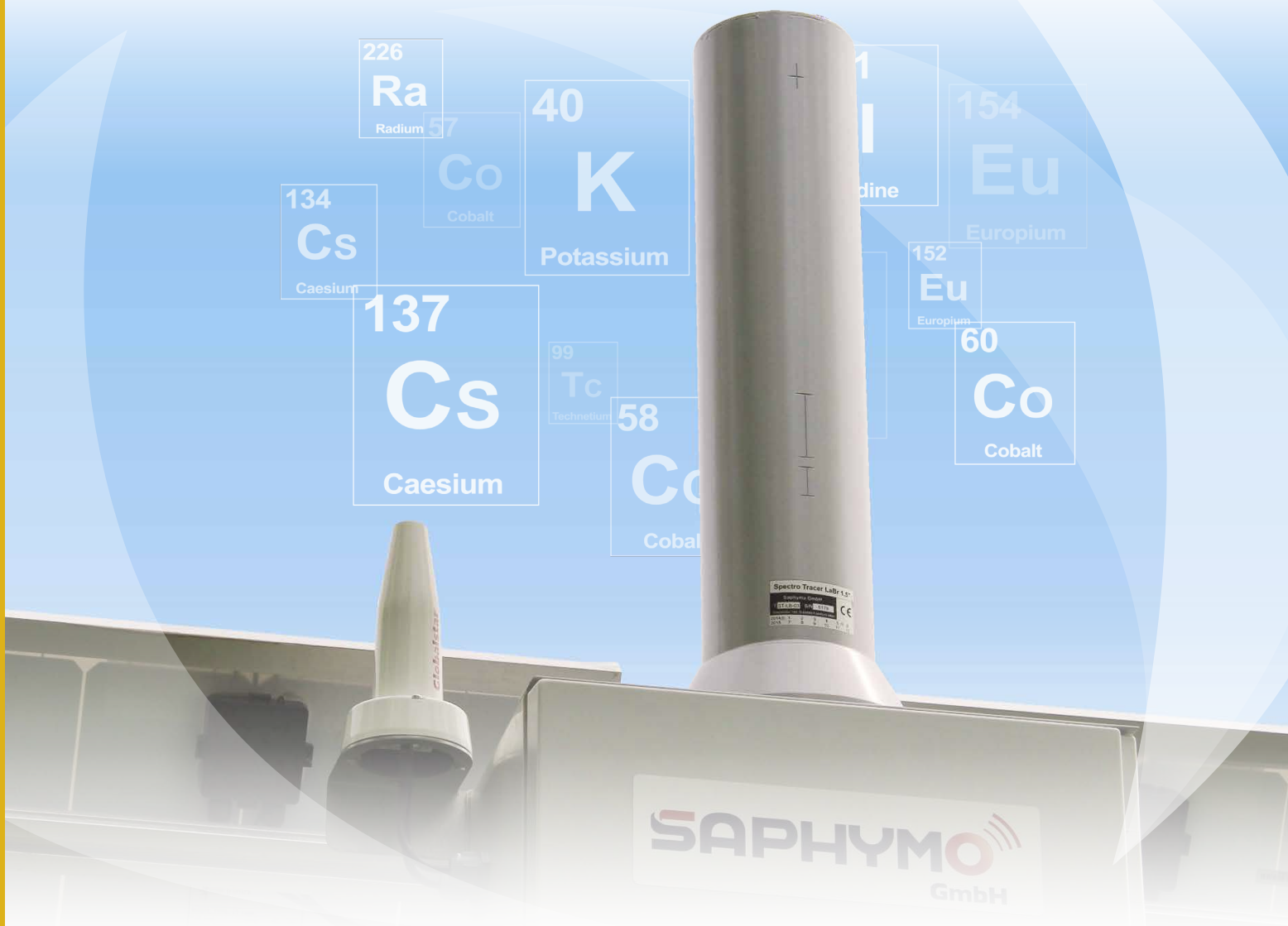


# SPECTROTRACER



Spectroscopic measuring probe



- Automatic radionuclide identification
- Adapted to air, soil or water applications
- Data transmission suitable for routine surveillance or emergency situations
- Very low maintenance

# SPECTROTRACER

## Spectroscopic solution for routine and emergency monitoring

SpectroTRACER is a continuous operating measurement system **for nuclide specific identification** and **low level gamma contamination monitoring** in air/soil (SpectroTRACER Air/Soil) and liquids (SpectroTRACER Aqua). The monitor calculates the ground contamination (Bq/m<sup>2</sup>) and the activity concentration (Bq/m<sup>3</sup>) for each identified nuclide as well as the dose rate H\*(10).

Seismic test approved, SpectroTRACER is **suitable both for day-to-day or emergency monitoring**. It includes also as option redundant data transmission (incl. satellite data communication) in case of electrical blackout disabling mobile phone networks.

The hermetically sealed SpectroTRACER probe is designed for **operation under harsh conditions demanding minimum maintenance**. Low power consumption enables stationary or mobile applications using battery back-up or solar supply.



## Versatile solution

### Air monitoring



From very low to increased radioactivity levels in the air

### Soil monitoring



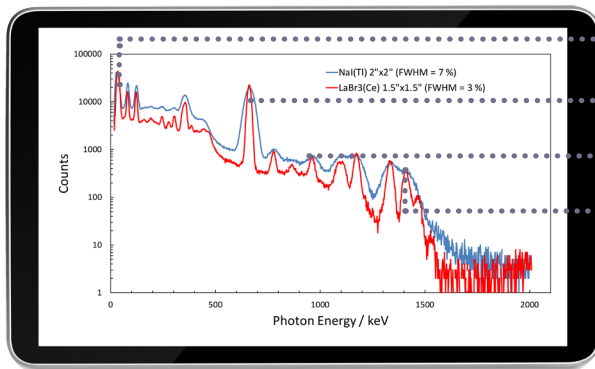
For ground contamination in accidental conditions

### Water monitoring



In nuclear facilities or outdoors (river, sea...) with special coating

## Identify several nuclides in one measurement



..... Ba-133 peaks

..... Cs-137 peaks

..... Eu-152 peaks

..... Co-60 peaks

Figure: comparison between LaBr<sub>3</sub>(Ce) and NaI(Tl) detectors sensitivity to identify nuclides

SpectroTRACER is available with 3 types of detector - NaI(Tl), CeBr<sub>3</sub> and LaBr<sub>3</sub>(Ce) - depending on the expected sensitivity. All detectors allow the identification of several radionuclides in one measurement.

## Environmental monitoring range

Discover other products of Bertin Instruments

### GammaTRACER Spider



Emergency probe for gamma monitoring

## Secured & centralized surveillance system



From one probe to turnkey solutions, your data can be secured and saved in a SQL central server and easily integrated in your internal processes or systems. Web based central data management is also available



## Technical features

### DETECTION PRINCIPLE

NaI(Tl), CeBr<sub>3</sub> or LaBr<sub>3</sub>(Ce) detector

### ENERGY RANGE

From 30 keV to 3 MeV (configurable)

### MEASUREMENT RANGE

NaI(Tl) 3"x3" up to 100 µSv/h  
CeBr<sub>3</sub> 1,5"x1,5" up to 1 mSv/h  
LaBr<sub>3</sub>(Ce) 1,5"x1,5" up to 1 mSv/h  
(all up to 1 Sv/h with optional GM tube)

### DATA STORAGE

2 GB storage (allows up to 1-year local storage in 10 min mode)

### ADDITIONAL SENSORS

Built-in: temperature, humidity  
Optional: rain, wind

### HOUSING MATERIAL

Nano-painted Aluminum (teflonized in option for water monitoring)

### COMMUNICATION INTERFACES

Ethernet, 4G/LTE, satellite, radio, WiFi

### DIMENSIONS / WEIGHT

Ø175x567 mm / 6,4 kg max.  
(more compact version in option)

With the expertise of **SAPHYMO**