

# GALILEO 9900P

# CONTINUOUS GAMMA MONITOR OF MOVING MATERIALS







Large, high-sensitivity plastic scintillators

Installed above or under a conveyor

User-friendly management software interface

Parameters setting (alarm threshold, integration time)

Data and graphs archive

Dedicated and customised functions available





Fast and reliable gamma monitoring for conveyors

Simple, highly adaptable architecture

**GALILEO 9900P** is a continuous gamma monitoring system designed to easily assess the contamination of moving materials, e.g. transported by a conveyor, through a fast gamma radiation detection performed by a large plastic scintillator. **GALILEO 9900P** main application is the monitoring of scrap metal, steel plates, or foundry dust, but it can be employed wherever a continuous gamma monitoring of moving materials is required. The architecture of the system is simple and modular, thus highly adaptable.

GALILEO 9900P is composed of:

- a stainless steel detector box to be installed (typically) directly above or under a conveyor
- an acquisition unit with counter module and software interface installed on a panel PC, housed in a wall-mounted box

Measurements are performed continuously, through a moving average data analysis based on a pre-set integration time. The environmental background is automatically determined or it can be set as a fixed value, and it is automatically subtracted.

Luminous and acoustic warnings are issued when the pre-set alarm threshold is trespassed.

The results of the measurements are saved in the internal archive, and printable reports are available to the user.

The plastic detector is shielded on the sides not facing the material to be monitored with lead sheets to reduce the environmental background contribution. The typical volume of the plastic scintillator is 25 l.

The detector is equipped with a PMT and an electronics module for HV supply and signal processing. The counter and power supply modules are installed inside the panel PC box.

### **TECHNICAL SPECIFICATIONS**

#### **Detection unit**

- Detector type: plastic scintillator
- Sensitive volume: 25 l
- Dimensions: 1000 x 500 x 50 mm

#### **Detector housing**

- Dimensions: 600 x 1480 x 220 mm
- Weight: 171 kg
- Material: stainless steel, 3 mm thick
- Shielding: lead, 10 mm thick

#### Central acquisition unit

- Hardware: counter module and panel PC
- Data communication: RS485





GALILEO 9900P software interface



GALILEO 9900P examples: monitoring of wheeled carts and of dusts on a conveyor belt

# OPTIONS

• Desktop PC as an alternative to panel PC

## **ACCESSORIES AVAILABLE UPON REQUEST**

- ALU alarm unit for status signalling
- Warranty extension from 12 months to 24 months

