Portal Monitor GammaPort

Radiation Monitor System
for scrap metal and urban solid waste

- DATA SHEET -
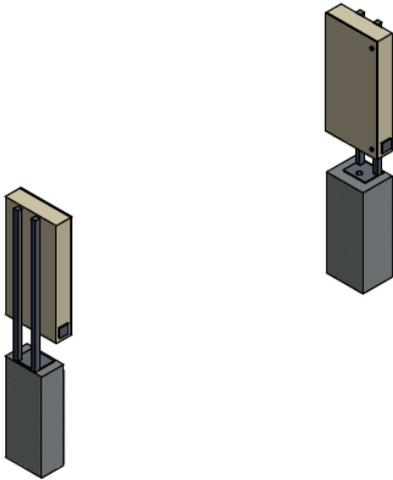
Large surface scintillation detectors

Example of the Portal Monitor with the scintillation detectors

CE

Made in Italy from l'acn

CERTIFICATIONS   *UNI EN ISO 9001:2008*
                                   UNI CEI EN ISO 13485:2012

Description

gammaPort is a monitor system for gamma radiation appositely designed to perform a simple, safe and reliable measurment of radioactive contamination in scrap metal waste transported on-wheels.
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gammaPort uses n. 2 large surface scintillation detectors is suitable for companies that have a frequent number of vehicles in transit. High sensitivity, low false alarm rate and user friendly software make it an excellent support work .
A microprocessor board connects the system to a Personal Computer, which allows to acquire and record the measurements' data.
An acoustic and light alarm signal is produced every time an excessive level of radiation is measured, allowing the user to stop and perform further investigations on the contaminated cargo.

Features

n. 2 large surface scintillation detectors (SCIONIX) 100 x 50 x 5 cm everyone (height x width x thickness)
Electronic unit:

- n. 1 High Voltage Unit with adjustable exit 600 to1200V
- microprocessor unit for real-time data acquistion and transfer via RS232 serial port interface
- Adjustable thresholds 70 to 1800 keV
- thermal regulation system for environmental control (heathing and refrigeration)

On demand specifications can be customized, after verification of feasibility by our technical staff.

Example of realization with the outdoor electronic unit

Electronics Unit and Software for data Acquisition

The acquisition electronic unit is equipped with a standard RS232c serial port and the PC has Rj45 Running under Windows O.S. ,it allows to acquire abd analyze measurements' data by the following functions:

- separate acquisition by each single detector
- activation of an acoustic and light signal by a previously set alarm
- threshold for each detector
- standard procedures for measurements control
- tests for verification of functionality
- procedures for testing and calibration
- environmental monitoring when the portal is not busy from the vehicle
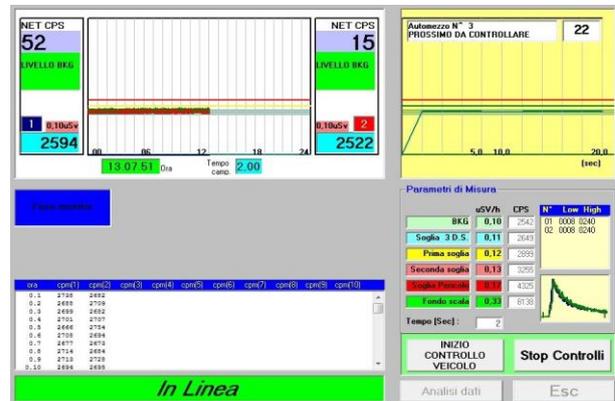
Software Screen

Report

- printer for all measurements taken during the working day
- print Summary of the day in which shows the hourly average data indicating in red alarms
- print a report of the passage of each vehicle

gammaPort comes complete with the latest generation PC with Windows O.S. , 19 "LCD monitor, mouse, keyboard, printer inkjet and management software.

TECHNICAL SPECIFICATIONS

DETECTORS:	n. 2 large surface scintillation detectors SCIONIX (100hx50x5 cm)
INTERFACE TO PC:	serial port RS-232
POWER SUPPLY:	220 V
ALARM:	- acoustic and light alarm on the portal board - light alarm on the PC monitor
MANUAL:	English/Italian
SOFTWARE:	English/Italian, on Windows O.S.