# **ENVIRONMENTAL MONITORING SYSTEM**

**Environmental Monitoring System** consists of a central management unit, and by detecting unit devices capable of measuring gamma radiation or neutron.

A series of detectors and accessories allows you to configure the monitoring system and customize it according to the installation layout.

The probes are constructed in order to be suitable for GMP installation: no cable to view and electronics housing in stainless steel with finish decontaminable.

The system allows you to select the operating parameters of the detectors (alarms, measurement units, etc. ..) directly from the central management unit.



## **AVAILABLE PROBES**

- MP-GM Area detector with monitor G.M.
- o MP-ND Area Neutron detector with monitor
- MP-STACK NaI (TI) (monitoring air chimney)
- o MP-GM-HC Monitoring for hot cells

# **OPTIONS**

- Column for light detection unit
- o Flowmeter for MP-STACK
- o Second viewer for concentrator
- o Relay output to drive other device



#### MP-CU

Concentrator with virtual maps.

Allows operators to monitor levels of radiation of a structure through the installation of probes and spread of a transfer system and data acquisition.

The software reads the measurement data from the probes and shows any abnormalities or alarm system



## MP-ND

Detector: 3He moderated. Energy of the neutrons from thermal to 20 MeV

Dose-rate range:  $100 \, \text{nSv} \, / \, \text{h}$  to  $100 \, \text{mSv} \, / \, \text{h}$  Sensitivity:  $3.15 \, \text{counts} \, / \, \text{nSv}$ , for E =  $3 \, \text{MeV}$ 

Serial connection to MP-CU via RS-485



#### MP-PE

Gamma detector consisting of two probes GM compensated in energy.



#### MP-GM

 $\label{lem:compensated} \mbox{Gamma detector consisting of two probes GM compensated in energy.}$ 

Range of measurement: from 0.1 mSv / h at a maximum of 3 Sv / h.

Configurable Parameters: Unit, calibration factors, 2 threshold levels.

the detectors are suitable for installation in facilities with GMP requirements



#### MP-GM-R

 $\label{lem:consisting} \mbox{ Gamma detector consisting of two probes GM compensated in energy.}$ 

Range of measurement: from 0.1 mSv / h at a maximum of 3 Sv / h.

Configurable Parameters: Unit, calibration factors, 2 threshold levels.

The detectors are suitable for installation in facilities with GMP requirements.

With remote probe. Max cable length: 20 m



#### MP-GM-HC

Gamma detector consisting of two probes GM compensated in energy.

Range of measurement: from 0.1 mSv / h at a maximum of 3 Sv / h.

 $Configurable\ Parameters:\ Unit,\ calibration\ factors,\ 2\ threshold\ levels.$ 

With remote probe. Max cable length: 20 m



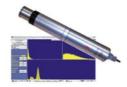
#### MP-STACK

Continuous monitoring for the fireplace with probe NaI (TI) 2 "x 2".

Microprocessor technology, MCA and stabilizer gain.

Flow meter for exhaust air volume calculation.

Complete set of calibration routines are included in the PC control system MP. The system, thanks to the ability to measure the background in continuous, requires no additional compensation probes of the fund.



#### MP-FL

Flussimeter for MP-STACK



#### MP-AS-GM

Automatic shutdown probes MP-GM for Bunker cyclotron: This option allows you to preserve the durability of the gamma probe installed in the bunker



## **OPTIONS**

MP-AL-CU Luminous Column inclusive the support. LED lamps

MP-AR Remote control that allows the service to control the system via Ethernet

MP-RL 7 programmable dry contacts to use alarms to interlock devices

MP-UPS Allows saving of data system shutdown in the event of a power outage

MP-LD Local display for MP-CU



