



## **FEATURES**

- · Compact and integrated unit
- Manual flow rate control
- Network capability

# **PIS 204L**

# Particulate and/or Iodine Sampler

The PIS 204L forms part of the RAMSYS product line.

It has been developed to continuously sample draw of particulate and iodine, in both molecular and organic forms (methyl iodine), in air from effluent stacks, ventilation ducts and/or working areas, in a mild environment.

The nominal flow rate for this sampler is adjusted via a manual valve without automatic control. The radioactive particulate trapped on designated paper filter can be submitted to laboratory analysis specific tests as: qualitative analysis (spectrographic or chemical) to identify the isotopes, quantitative analysis using reflectometer, measurement of particulate radioactivity.

# **APPLICATIONS**

• Effluent release monitoring

## **RELATED MONITORS**

- PIS 203S: post-accident version
- PIS 205L: version with dynamic flow rate control





## PHYSICAL CHARACTERISTICS

- · Particulate:
- Filter type: FSLW or equivalent Ø 47 to 57 mm (1.8 to 2.2 in)
- Efficiency: > 99%
- · lodine:
- Cartridge type: silver zeolite or active charcoal
- Efficiency: > 99% for methyl iodine (HR 60%)
- Filter/cartridge change frequency: one per week if continuous trapping

# **ENVIRONMENTAL CHARACTERISTICS**

- · Long term temperature:
  - +10°C to +40°C (+50°F to +104°F)
- Maximum periodic ambient temperature: +0°C to +45°C (+32°F to +113°F)
- Storage temperature:
- During 96 hours: -25°C to +85°C (-13°F to +185°F)
- Pressure: 860 to 1060 hPa
- MTBF: > 20 000 hours, with preventive maintenance
- Protection index: IP32

### PNEUMATIC CHARACTERISTICS

- · Nominal flow rate:
- By default: 35 l/min (1.25 scfm)
- Minimum: 10 l/min (0.36 scfm)
- Maximum: 50 l/min (1.79 scfm)

### **MECHANICAL CHARACTERISTICS**

- Dimensions: 930 mm x 435 mm x 370 mm (36.6 in x 17.1 in x 14.5 in)
- Weight: ~ 15 kg (~ 33.6 lb)
- Color: gray RAL 7030 (decontaminable paint)

## **ELECTRICAL CHARACTERISTICS**

- Power supply: 230 Vac 50 Hz or 120 Vac 60 Hz
- Data link outputs: 1 RS232 on DB9 connector on front panel and 2 isolated RS485 via cable glands
- · Alarm relays: 3 DPDT relays

## **SIGNALING**

- · Alphanumeric display: measurement, status...
- Sound alarm: buzzer 90 dBA at 1 meter
- Visual alarm: 1 light (red)

### REFERENCE STANDARDS

 EMC: 2006/95/CE and 2004/108/CE, IEC61000-6-2 and IEC61000-6-4

### **VERSIONS**

• 230 Vac or 120 Vac

### **ACCESSORIES**

- Maintenance and set-up software (MASS2)
- Wall installation
- · FSLW filter or equivalent
- · Zeolite or charcoal cartridge
- MODBUS/TCP
- Material to adapt to each sheath:
- Isokinetic sampling



## Radiation Monitoring Systems Division

Mirion Technologies (MGPI) SA BP 1

FR-13113 Lamanon France

T +33 (0) 4 90 59 59 59 F +33 (0) 4 90 59 55 18 Mirion Technologies (MGPI) Inc 5000 Highlands Parkway Suite 150 Smyrna, GA 30082 USA

T +1.770.432.2744 F +1.770.432.9179 Mirion Technologies (MGPI H&B) GmbH

Landsberger Strasse 328a DE-80687 Munich

Germany

+49 (0) 89515 13-0

F +49 (0) 89515 13 169

www.mirion.com 145020EN-C