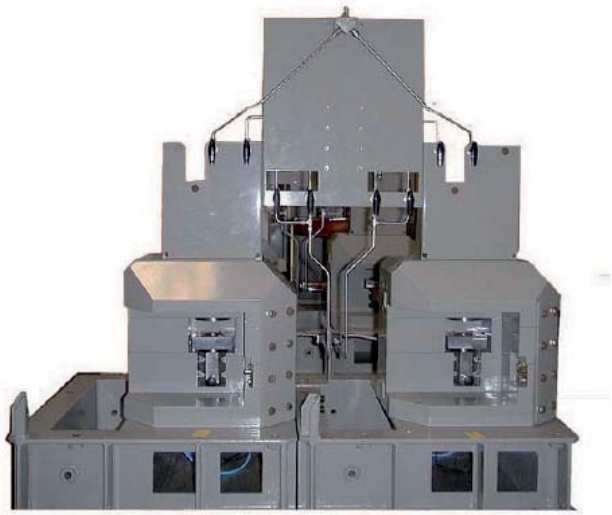
PIS 203S
Shielded Particulate and Iodine Sampler



The PIS 203S sampler forms part of the RAMSYS product line. It has been developed to sample air effluents under accident conditions conforming to the requirements set forth by RG 1.97. One sampler for batch sampling or dual samplers for continuous sampling are available with or without heat tracing. The sample flow rate through the sampler is measured and totalized. The collected activities of particulates and iodine are periodically analyzed in a laboratory as needed.

The PIS 203S is typically used in conjunction with noble gas monitor and an aeraulic skid that automatically control the operation from standby to active sampling as applicable.

FEATURES

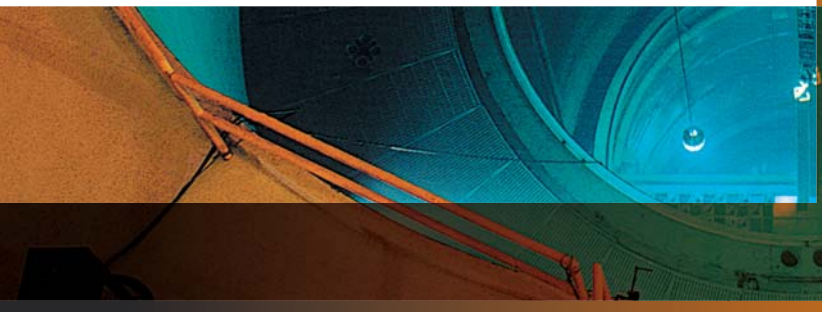
- Available for batch or continuous sampling acquisition version (single or dual PIS 203S units)
- Automatic start up in accident configuration
- Heat tracing available when required
- Provided with manipulation tools and lead shielded transport cart
- RG 1.97 compliance
- Heavily shielded for ALARA radiation considerations
- Available under 10 CFR 50 App.B, ASME NQA-1 and IEC61226 programs for safety related application

APPLICATIONS

- Effluent release monitoring
- Post-accident operations

RELATED MONITORS

- PIS 204L: « light » version
- PIS 205L: « light » version with flow rate control
- NGM 203S: low range noble gas monitor
- NGM 204S: high range noble gas monitor
- PING 206S: particulate, iodine and noble gas monitor



radiation monitoring systems

A Mirion Technologies Division

Featuring:

PHYSICAL CHARACTERISTICS

- Particulate:
  - Filter type: fiberglass
  - Efficiency: > 99.95%
- Iodine:
  - Cartridge type: silver zeolite
  - Efficiency: > 99.99% (for methyl iodine)
- Lead shielding: 4 π/15 cm (4 π/5.9 in)
- Concentration on filter: 3.7 10^{+7} to 3.7 10^{+12} Bq/m^3 (10^{-3} to 10^{+2} µci/cc)

ENVIRONMENTAL CHARACTERISTICS

- Long term temperature: +10°C to +40°C (+50°F to +104°F)
- Maximum periodic ambient temperature: +0°C to +55°C (+32°F to +131°F)
- Pressure: 860 to 1060 hPa
- MTBF: > 20 000 hours, with preventive maintenance

PNEUMATIC CHARACTERISTICS

- Standard flow rate: 1 l/min

MECHANICAL CHARACTERISTICS

- Dimensions: 1214 mm x 650 mm x 740 mm (48 in x 25.6 in x 29.1 in)
- Weight: ~ 750 kg (~ 1650 lb)
- Color: gray RAL 7030 (decontaminable paint)
- Inlet tube connection: Ø 6.3 mm OD (1/4 in)
- Outlet tube connection: Ø 6.3 mm OD (1/4 in)

ELECTRICAL CHARACTERISTICS

- Power supply: refer to possible versions

SIGNALING

- Alphanumeric display: measurement, status…
- Sound alarm: buzzer 90 dBA at 1 meter
- Visual alarm: 3 lights (red, yellow, green)

REFERENCE STANDARDS

- Nuclear: RG 1.97
- EMC: 2006/95/CE and 2004/108/CE

VERSIONS

- 230 Vac or 230 Vac + 400 Vac 3Ø or 120 Vac + 400 Vac 3Ø
- Single module or dual unit
- Heat tracing with heat control unit, temperature sensors, thermal insulation and heating cartridge

ACCESSORIES

- Shielded transport cart
- Sampling handling tool
- Filter paper

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