



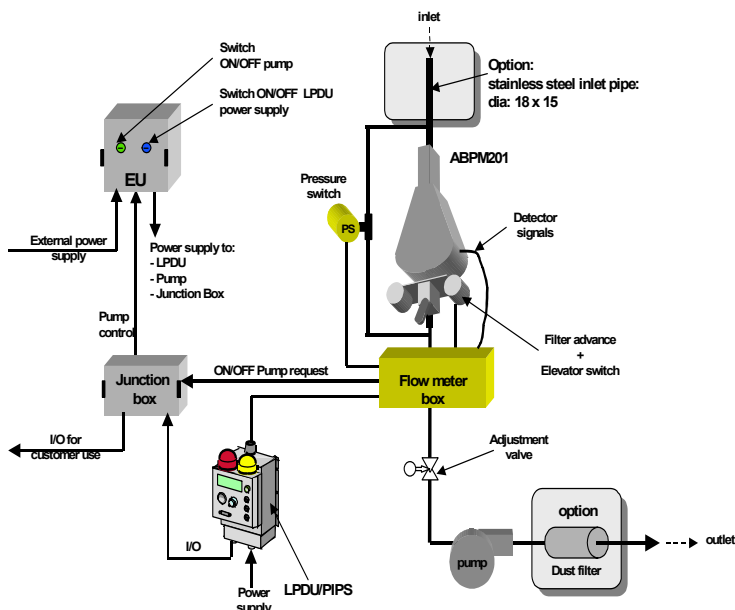
ABPM 201 M

Mobile Alpha beta particulate monitor

- continuous air monitoring and display of the α and β volumetric activity
- visual, audible and electrical signal alarms whenever threshold levels are exceeded
- static and dynamic compensation of the Radon and Thoron solid progenies
- γ dose rate indication
- natural and artificial α volumetric activity indication
- on-line spectrometry
- up to 6 months filter cassette autonomy

The ABPM 201 M monitor forms part of the **RAMSYS** product line. It has been developed to sample air extracted from ventilation ducts or stacks. A double silicon detector (pips) performs the γ compensation and a radial fin grid limits the scattering of the α particles (static compensation) which facilitates the compensation of the Radon and Thoron solid progenies by the processing algorithms (dynamic compensation).

Operating costs are minimised by the the autonomous operation through automatic filter advance management. This monitor is also available in «light» or seismically qualified version.



Physical characteristics

- radiation detected: alpha, beta and gamma
- detector: Silicon
- filter:
 - type FSLW
 - autonomous: up to 6 months
 - efficiency: > 99.99 % for particles Φ : 4 μ m
- measurement range (IEC60761):
 - alpha: 10^{-2} to $3.7 \cdot 10^6$ Bq/m³ ($2,7 \cdot 10^{-13}$ to 10^{-4} μ Ci/cc)
 - beta: 1 to $3.7 \cdot 10^6$ Bq/m³ ($2,7 \cdot 10^{-11}$ to 10^{-4} μ Ci/cc)
- energy range:
 - alpha 2 MeV to 10 MeV
 - beta 80 keV to 2,5 MeV
 - gamma 80 keV to 2,5 MeV
- temperature range: +0°C to +55°C (32°F to 131°F)

Electrical characteristics

- power supply: 120V 60Hz - 230V 50Hz
- interfaces:
 - RS 232 Serial link for parameter configuration of the monitor through PC and MASS application software
 - two 0/4 - 20 mA analog outputs, one 0/4 - 20 mA analog input, three programmable relays, two RS 485 isolated serial links

Mechanical characteristics

- protection index: IP 65 (electronics) and IP 54 (pump)
- color (decontaminable paint): grey RAL 7030
- sizes: 1406 x 520 x 708 mm (55.3 x 20.4 x 27.9 in)
- weight: ~120 kg (264 lb)
- interfaces:
 - input sampling: pipe ϕ 18 mm OD (0.7 in)
 - output sampling: pipe ϕ 12 mm OD (0.47 in)

Qualification

- EMI/RFI: EN 55022, CEI 61000-6-2, CEI 61000-6-4

Alarm signaling (applicable to LPDU only)

- audio indicators: buzzer sound alert rated at 90dBa at one meter
- visual indicators: programmable operation lights such as red for high alarm, yellow for alert alarm, green for normal operation

Accessories

- RAMSYS softwares
- Isokinetic probe
- sampling inox pipe
- dust filter in pump output
- set of calibration (²⁰⁴Tl sources and its fixture)
- 406 MHz radiomodem

RAMSYS: Radiation Monitoring System