



FEATURES

- Dynamic gamma radiation compensation
- Compact and reliable
- Minimum periodic maintenance
- Tritium measurement capability

NGM 202L Noble Gas Monitor

The NGM 202L monitor forms part of the RAMSYS product line. It has been developed to continuously sample the volumetric activity of noble gas and tritium in a radioactive effluent gaseous sample. This monitor can operate as a stand alone device or in conjunction with a particulate monitor (ABPM 201), iodine monitor (IM 201) and with a high range noble gas monitor (NGM 203) to form a very wide range monitoring system.

APPLICATIONS

- Effluent release monitoring
 - Ventilation ducts
 - Stacks, etc.
- Radioprotection of workers

RELATED MONITORS

- NGM 203S: accident range noble gas monitor
- NGM 204L: low range noble gas monitor
- NGM 204S: low range noble gas monitor

radiation monitoring
systems

A Mirion Technologies Division

Featuring:



PHYSICAL CHARACTERISTICS

- Radiation detected: alpha, beta, gamma and tritium
- Detector: dual large differential ionization chamber
- Sampling chamber: 10 l (10000 cc) each
- Energy range: 5 keV to 8 MeV
- Typical measurement range: 10^{+4} to $3.7 \cdot 10^{+9}$ Bq/m³ ($2.7 \cdot 10^{-7}$ to 10^{-1} μ Ci/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)
- MTBF: > 20 000 hours, with preventive maintenance
- TID (processing unit): 25 Gy ($2.5 \cdot 10^{+3}$ rad)

PNEUMATIC CHARACTERISTICS

- Standard flow rate: 35 l/min (1.24 scfm)
- Pressure drop: according to the filter dust loading

MECHANICAL CHARACTERISTICS

- Dimensions: 1354 mm x 825 mm x 440 mm (53.3 in x 32.5 in x 17.3 in)
- Weight: ~ 96 kg (~ 212 lb)
- Color: gray RAL 7030 (decontaminable paint)
- Inlet tube connection: \varnothing 12 mm OD (1/2 in)
- Outlet tube connection: \varnothing 25.4 mm OD (1 in)

ELECTRICAL CHARACTERISTICS

- Power supply: 230 Vac – 50 Hz or 120 Vac – 60 Hz
- Data link outputs: 1 RS232 and 2 isolated RS485
- Alarm relays: 3 SPDT relays
- I/O: 2 isolated analog outputs and 1 isolated analog input (0/4-20 mA)

SIGNALING (Applicable to LPDU only)

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

REFERENCE STANDARDS

- Nuclear: IEC60761
- EMC: 2006/95/CE and 2004/108/CE, IEC61000-6-2 and IEC61000-6-4

VERSIONS

- 230 Vac or 120 Vac
- LPDU or LPU
- Pumping unit
- With or without RS485 junction box
- Monitor wall or floor mounting plate

ACCESSORIES

- Calibration tools
- Software
- USB converters
- Dust filter holder
- PIS sampler



MIRION
TECHNOLOGIES

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

T +49 (0) 89515 13-0
F +49 (0) 89515 13 169

www.mirion.com
144766EN-D