



**RAMSYS**

# NGM 202L™

*Low Range Noble Gas Monitor*

Continuously monitoring the volumetric activity of noble gas in a radioactive effluent gaseous samples.



## FEATURES

- Dynamic gamma radiation compensation
- Compact and reliable
- Minimum periodic maintenance

## DESCRIPTION

The NGM 202L monitor forms part of the RAMSYS product line.

It has been developed to continuously sample the volumetric activity of noble gas 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.

# NGM 202L | LOW RANGE NOBLE GAS MONITOR

## PHYSICAL CHARACTERISTICS

- Radiation detected: alpha, beta, gamma
- 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/m<sup>3</sup> ( $2.7 \cdot 10^{-7}$  to  $10^{-1}$   $\mu$ Ci/cc)

## ENVIRONMENTAL CHARACTERISTICS

- Normal temperature: +5°C to +40°C (+41°F to +104°F)
- Temperature limit: -5°C to +55°C (+23°F to +131°F)
- MTBF: > 20 000 hours, with preventive maintenance
- TID (processing unit): 100 Gy ( $10^{+4}$  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 (LPDU only) 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: IEC60761-1 and IEC60761-3
- EMC: 2014/30/EU and 2014/35/EU, IEC61000-6-2 and IEC61000-6-4

## VERSIONS

- 230 Vac or 120 Vac
- Local processing and display unit (LPDU) or local processing unit (LPU)
- Pumping unit
- With or without RS485 junction box
- Monitor wall or floor mounting plate

## ACCESSORIES

- Calibration tools
- Software: MASS2, RAMVISION...
- USB converters
- Dust filter holder
- PIS sampler

Featuring:



[www.mirion.com](http://www.mirion.com)

Copyright © 2019 Mirion Technologies, Inc. or its affiliates. All rights reserved. Mirion, the Mirion logo, and other trade names of Mirion products listed herein are registered trademarks or trademarks of Mirion Technologies, Inc. or its affiliates in the United States and other countries. Third party trademarks mentioned are the property of their respective owners.

144766EN-G



**MIRION**  
TECHNOLOGIES