



FEATURES

- Wide temperature range detector
- Compact and reliable
- Available with or without display and local signaling
- Small diameter detector
- Up to 200 m (650 ft) between GM detectors and processing unit
- Measurement in Gy/h (rad/h) or Sv/h (rem/h)

GIM 210K Dual Detector Gamma Area Monitor

The GIM 210K forms part of the RAMSYS product line. It has been developed to monitor dose rate or equivalent dose rate in nuclear facilities. It can manage simultaneously two separated detectors, either two SG/GM21, two SG/GM22 or one SG/GM21 + one SG/GM22.

APPLICATIONS

- Radioprotection of workers
- Operational process monitoring
- Gamma interlock, etc.

RELATED MONITORS

- GIM 207K: low range version (with SG/GM 21 detector)
- GIM 208K: high range monitor (with SG/GM 22 detector)
- GIM 209K: wide range version (with SG/GM 23 detector)

radiation monitoring
systems

A Mirion Technologies Division

Featuring:



PHYSICAL CHARACTERISTICS

- Radiation detected: gamma
- Detector: Geiger Muller tubes
- Energy range: 80 keV to 2 MeV
- Typical measurement range:
 - With two SG/GM 21 detectors:
10⁻⁶ to 10⁻³ Gy/h (10⁻⁴ to 10⁻¹ rad/h)
 - With two SG/GM 22 detectors:
10⁻⁴ to 1 Gy/h (10⁻² to 10⁺² rad/h)
 - With one SG/GM 21 and one SG/GM 22 detector:
10⁻⁶ to 1 Gy/h (10⁻⁴ to 10⁺² rad/h)

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
- TID (processing unit): 100 Gy (10⁺⁴ rad)
- TID (SG/GM 21 detector): 6 Gy (6 10⁺² rad)
- TID (SG/GM 22 detector): 370 Gy (3.7 10⁺⁴ rad)
- Protection index: IP65 and IK07

MECHANICAL CHARACTERISTICS

- Dimensions:
 - Processing unit: 390 mm x 196 mm x 187 mm
(15.3 in x 7.7 in x 7.3 in)
 - Detector: 184 mm (7.2 in) x Ø 28 mm (1.1 in)
- Weight:
 - Processing unit: 8.5 kg (18.7 lb)
 - Detector: 470 g (1 lb)
- Color (processing unit): gray RAL 7030 (decontaminable paint)

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: IEC60532
- Seismic: IEEE344 and IEC60980
- EMC: 2006/95/CE and 2004/108/CE, EPRI 102323, MIL STD 461 E, IEC61000-6-2 and IEC61000-6-4

VERSIONS

- 230 Vac or 120 Vac
- LPDU or LPU
- With or without RS485 junction box
- Detector cable length:
from 10 m (32.8 ft) to 200 m (656 ft)
- Junction box cable length:
5 m (16.4 ft) or 10 m (32.8 ft)
- Detector calibrated in Gy/h or Sv/h

ACCESSORIES

- Calibration tools
- Software
- USB converters
- Seismic qualified wall mounting bracket



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