



# **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 detector and processing unit
- Measurement in Gy/h (rad/h) or Sv/h (rem/h)

# **GIM 209K**

# Wide Range Gamma Area Monitor

The GIM 209K forms part of the RAMSYS product line. It has been developed to monitor wide range dose rate in nuclear facilities. A SG/GM 23 based on a double Geiger Muller tube to monitor gamma emitting

isotopes.

Its small diameter makes it suitable for the refurbishment of existing radiation monitoring system.

# **APPLICATIONS**

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

# **RELATED MONITORS**

- GIM 207K: low range version (with SG/GM 21 detector)
- GIM 208K: high range version (with SG/GM 22 detector)
- GIM 210K: dual detector version (with two SG/GM 21 or two SG/GM 22 or one SG/GM 21 + one SG/GM 22)





# PHYSICAL CHARACTERISTICS

- Radiation detected: gamma
- Detector: Geiger Muller tube
- Energy range: 80 keV to 2 MeV
- Typical measurement range: 10-6 to 1 Gy/h (10<sup>-4</sup> to 10<sup>+2</sup> rad/h)

# **ENVIRONMENTAL CHARACTERISTICS**

- Long term temperature: +10°C to +40°C  $(+50^{\circ}F \text{ to } +104^{\circ}F)$
- Maximum periodic ambient temperature: +0°C to +55°C (+32°F to +131°F)
- MTBF: > 20 000 hours
- TID (processing unit): 100 Gy (10<sup>+4</sup> rad)
- TID (detector): 6 Gy (6 10+2 rad) Protection index: IP65 and IK07

#### MECHANICAL CHARACTERISTICS

- Dimensions:
- Processing unit: 390 mm x 196 mm x 187 mm  $(15.3 \text{ in } \times 7.7 \text{ in } \times 7.3 \text{ in})$
- 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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