



FEATURES

- Wide measurement range
- Compact and reliable
- Available with or without display and local signalling
- RG 1.97 compliance
- 1E qualification and embedded safety related software
- Available under 10 CFR 50 App.B, ASME NQA-1 and IEC61226 programs for safety related applications
- LOCA proof detector and cable
- Very high TID
- Seismic qualification

GIM 203K

Wide Range Gamma Area Monitor

The GIM 203K forms part of the RAMSYS product line. It has been developed to continuously monitor gamma dose rate under harsh environment conditions. It is particularly useful for monitoring the dose rate inside containment and in the reactor building during and after mild and severe accidents under harsh operating conditions.

APPLICATIONS

- Radioprotection of workers
- Containment atmosphere, etc.
- Post-accident operations

RELATED MONITORS

- GIM 201K: low range gamma area monitor
- GIM 202K: wide range gamma area monitor
- GIM 205K: medium range gamma area monitor
- GIM 206K: high range gamma area monitor

radiation monitoring
systems

A Mirion Technologies Division

Featuring:



PHYSICAL CHARACTERISTICS

- Radiation detected: gamma
- Detector: stainless steel ionization chamber (KG 221 SER)
- Energy range: 80 keV to 7 MeV
- Typical measurement range: 10^{-6} to 10^{+3} Sv/h (10^{-4} to 10^{+5} rem/h)

ENVIRONMENTAL CHARACTERISTICS

- Long term temperature (processing unit): +10°C to +40°C (+50°F to +104°F)
- Maximum periodic ambient temperature (processing unit): +0°C to +55°C (+32°F to +131°F)
- Long term temperature (detector): -30°C to +135°C (-22°F to +275°F)
- MTBF: > 20 000 hours
- TID:
 - Processing unit: 25 Gy ($2.5 \cdot 10^{+3}$ rad)
 - Detector: $2 \cdot 10^{+6}$ Gy ($2 \cdot 10^{+8}$ rad)
- Protection index:
 - Processing unit: IP65 and IK07
 - Detector: IP67 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: 240 mm (9.5 in) x Ø 280 mm (11 in)
- Weight:
 - Processing unit: 8.5 kg (18.7 lb)
 - Detector : 24 kg (53 lb)
- Color: 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: IEC60951 and IEC60532
- Environmental: IEEE323 and IEC60780, including LOCA test
- 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
- Mineral or organic detector cable
- Detector cable length: from 10 m (32.8 ft) to 70 m (229.6 ft)
- Junction box cable length: 5 m (16.4 ft) or 10 m (32.8 ft)

ACCESSORIES

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



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