



# **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 206K

High Range Gamma Area Monitor

The GIM 206K forms part of the RAMSYS product line. It has been developed and qualified to monitor dose rate during accident and post accident conditions, inside or outside containment of nuclear power plants. The design of the ionization chamber of this monitor allows a great reliability for safety applications.

# **APPLICATIONS**

- Radioprotection of workers
- Operational process monitoring
- Post-accident operations

## **RELATED MONITORS**

- GIM 201K: low range gamma area monitor
- GIM 202K: wide range gamma area monitor
- GIM 203K: wide range gamma area monitor
- GIM 205K: medium range gamma area monitor



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# **PHYSICAL CHARACTERISTICS**

- · Radiation detected: gamma
- Detector: stainless ionization with embedded source (KG 50 SEC)
- Energy range: 60 keV to 7 MeV
- Measurement capability: 10<sup>-4</sup> to 10<sup>+5</sup> Gy/h (10<sup>-2</sup> to 10<sup>+7</sup> rad/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): +0°C to +135°C (+32°F to +275°F)
- MTBF: > 20 000 hours
- TID:
- Processing unit: 25 Gy (2.5 10<sup>+3</sup> rad)
- Detector: 2 10<sup>+6</sup> Gy (2 10<sup>+8</sup> 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: 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: 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)



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#### 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
- 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); length up to 140 m (459.3 ft) is also possible, by means of two sets of mineral extension cables
- 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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