



RAMSYS™

GIM 205K™

Medium Range Gamma Area Monitor



Monitoring of dose rate in nuclear facilities for process monitoring. Perfect for sump monitoring.

DESCRIPTION

The GIM 205K monitor forms part of the RAMSYS product line. It has been developed to monitor dose rate in nuclear facilities for process monitoring. Its ionization chamber is waterproof and makes it perfectly suitable for sump monitoring.

A version based on a differential ionization chamber allows for compensation of the ambient background.

FEATURES

- ✓ Wide measurement range
- ✓ Wide detector and cable temperature range
- ✓ High detector and cable TID
- ✓ Compact and reliable
- ✓ Available with or without display and local signaling
- ✓ Waterproof detector
- ✓ Indoor and outdoor applications

GIM 205K™ MEDIUM RANGE GAMMA AREA MONITOR

PHYSICAL CHARACTERISTICS

- Radiation detected: gamma
- Detector: stainless steel ionization chamber (SG/IC41 or SG/ICD41)
- Energy range: 87 keV to 7 MeV
- Typical measurement range: 10^{-5} to 10^{+3} Gy/h (10^{-3} to 10^{+5} rad/h)

ENVIRONMENTAL CHARACTERISTICS

- Nomal temperature: +5 °C to +40 °C (+41 °F to +104 °F)
- Temperature limit:
 - Processing unit: -5 °C to +55 °C (+23 °F to +131 °F)
 - Detector and cable: -5 °C to +70 °C (+23 °F to +158 °F)
- MTBF: > 50 000 hours
- TID:
 - Processing unit: 100 Gy (10^{+4} rad)
 - Detector and cable: $5 \cdot 10^{+4}$ Gy ($5 \cdot 10^{+6}$ rad)
- Protection index:
 - Processing unit: IP65 and IK07
 - Detector: IP65, IP67 and IK07

MECHANICAL CHARACTERISTICS

- Dimensions:
 - Processing unit: 370 mm x 196 mm x 187 mm (14.6 in x 7.7 in x 7.3 in)
 - Detector: \varnothing 63.5 mm (2.5 in) x 174 mm (6.8 in)
- Weight:
 - Processing unit: 8.5 kg (18.7 lb)
 - Detector (SG/IC41): 2 kg (4.4 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: one RS232 and two isolated RS485
- Alarm relays: three SPDT relays
- I/O: two isolated analog outputs and one 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: three lights (red, yellow, green)

REFERENCE STANDARDS

- EMC: 2014/30/EU and 2014/35/EU, EPRI 102323, RG 1.180, IEC61000-6-2 and IEC61000-6-4

VERSIONS

- 230 Vac or 120 Vac
- Local processing and display unit (LPDU) or local processing unit (LPU)
- With or without RS485 junction box
- Detector cable length: from 5 m (16.4 ft) to 50 m (164 ft)
- Junction box cable length: 2 m (6.56 ft), 5 m (16.4 ft) or 10 m (32.8 ft)
- Differential chamber (SG/ICD41) for dynamic background compensation

ACCESSORIES

- Calibration tools
- Software: MASS2™, RAMVISION™, SIMS2™ applications...
- USB converters
- Seismic qualified wall mounting bracket



MIRION
TECHNOLOGIES

Copyright © 2023 Mirion Technologies, Inc. or its affiliates. All rights reserved. Mirion, the Mirion logo, and other trade names of Mirion products listed here in 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.