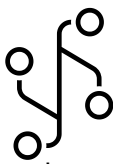




GM-1, MERCURY

GEIGER-MULLER-BASED GAMMA DETECTORS



Several models
available



Proven
high reliability



Special versions
available

Energy-compensated
Geiger-Müller tubes

Measurement range:
100 nSv/h ÷ 1 mSv/h
or 100 nSv/h ÷ 1 Sv/h

Energy range:
40 keV ÷ 1300 keV

Wall mounting accessory

Connectable to a SATURN
ratemeter

According to the measurement requirements, different versions of Geiger-Müller detectors are available:

- **GM-1:** single-Geiger detector (up to 1 mSv/h)
- **MERCURY:** double-Geiger detector (up to 1 Sv/h)

All models employ energy-compensated tubes, lodged in high-protection aluminium cylinders, together with a built-in HV board.

MERCURY detectors are equipped with 2 Geiger-Müller tubes to reach a wider measurement range. An internal electronics automatically switches to the suitable GM tube according to the count rate level.

Both the **GM-1** and the **MERCURY** detectors are connected to and managed by a SATURN ratemeter, which provides power supply, signal processing and data visualization. Each detector-ratemeter couple forms a monitoring unit, which can be connected in a network to a central host PC running 5700 sMON management software.

Among the special versions and accessories available, we mention in particular:

- Stand-alone version of GM detectors for direct connection to PC
- IP65 housing for MERCURY for outdoor installations
- PS-ZB accessory for MERCURY, providing battery-operated power supply and ZigBee Wireless communication, and ZB-TC receiver connected to the ratemeter to acquire the data
- GPS locator for PS-ZB

TECHNICAL SPECIFICATIONS

- Communication interfaces:
 - GM-1: TTL signal output or RS485
 - MERCURY: RS232 or RS485 (Wireless ZigBee upon request)
- Detector type: energy-compensated Geiger-Müller tubes
- Dose rate range:
 - GM-1: 100 nSv/h ÷ 1 mSv/h
 - MERCURY: 100 nSv/h ÷ 1 Sv/h
- Total dimensions:
 - GM-1: Ø = 40 mm; L = 196 mm
 - MERCURY: Ø = 70 mm; L = 420 mm
- Weight: < 1 kg
- Energy range: 40 keV ÷ 1300 keV
- Energy response: +30 / -20%
- Linearity: deviation <10% from 100 nSv/h to 100 mSv/h
- Temperature range: -25°C ÷ +50°C
- Relative humidity: up to 95% (non-condensing)

OPTIONS

- ZigBee Wireless communication (MERCURY)

ACCESSORIES AVAILABLE UPON REQUEST

- Traceable calibration (1 dose rate point, Cs-137)
- Wall mounting accessories
- Airtight PMMA holder for duct mounting (GM-1): GM-ATH
- IP65 housing for outdoor use (MERCURY)
- Battery-operated PS station with ZigBee Wireless communication: PS-ZB (MERCURY)
- GPS locator (as part of PS-ZB module)
- ZigBee Wireless receiver: ZB-TC
- Warranty extension from 12 months to 24 months



MERCURY with IP65 accessory

