

PDS-GO

Personal Radiation Detector



The PDS-GO is a lightweight, small, sensitive, personal gamma radiation detector, designed to meet the ANSI N42.32 radiation detection requirements. It has been designed using the latest state-of-the-art electronic components including the advanced technology of Silicon photomultiplier as a detector.

The PDS-GO boasts a measuring range from background radiation level to 50 mR/h (500 μSv/h) with a sensitivity of 1100 cps/mR/h (110 cps/μSv/h) and is therefore ideal to use as a highly sensitive survey meter.

The PDS-GO features twin displays using LCD's. On the top side, when it is carried on the user belt, with clear and simple indication of presence and intensity or absence of radiation field, and with an additional on front LCD with more and complementary information to the upper LCD, to be used after pulling out the instruments from belt.

The PDS-GO is especially useful for first responders, law enforcement officers and for all radiation professionals dealing in safety and security of sensitive installations, public areas and border control. This small instrument is easily carried on the body and is used to detect and indicate the presence and magnitude of gamma emitting radiation.

FEATURES

- Scintillation crystal for high efficiency and extended energy storage
- Excellent sensitivity and very fast response
- Excellent temperature stability
- Two operation modes (Detect and Search)
- Low power consumption - extended operating hours
- Instrument setup (alarm thresholds and other parameters) using a user-friendly software
- Record of event history
- Rechargeable battery - charging via USB connection inside the cradle
- Accessories include: protective silicon cover, belt clip, charging cradle, USB cable

FUNCTIONAL FEATURES

- Meets ANSI 42.32 and ANSI 42.33
- Alarm indication: adjustable; visual, vibration, audible (1000–4000 Hz, 85 dB(A) at 30 cm)
- Time to alarm: < 2 seconds
- Communication: via PC based user interface software (mini USB connection)

NUCLEAR CHARACTERISTICS

- Detectors: CsI (TI) crystal with Silicon Photomultiplier
- Measuring Range: 1 $\mu\text{R/h}$ to 50 mR/h (0.1 $\mu\text{Sv/h}$ to 500 $\mu\text{Sv/h}$) (ref. 137Cs)
- Energy Range: from 50 KeV to 1,7 MeV
- Energy Response: better than 20% for the whole energy range
- Sensitivity (137Cs): 110 cps/ $\mu\text{Sv/h}$ (1,100 cps/mR/h)
- Detection Capability: 50 $\mu\text{R/h}$ (0.5 $\mu\text{Sv/h}$) above 25 $\mu\text{R/h}$ (0.25 $\mu\text{Sv/h}$) background with 95% confidence in less than 2 seconds

ELECTRICAL & MECHANICAL CHARACTERISTICS

- Batteries: Li-ion 3,7 V rechargeable battery
- Battery Life: 120 h power under normal conditions
- Dimensions: 3.89 in x 2.16 in x 0.94 in (99 mm x 55 mm x 24 mm)
- Weight: 4.41 oz (125 g) with batteries

ENVIRONMENTAL CHARACTERISTICS

- Operating Temperature : - 20°C to + 50°C
- Humidity: up to 93% at 35°C (95°F)
- IP-64 protection

ACCESSORIES

- Silicon casing, included
- Mini USB cable, included
- Cradle, supplying power and communication enhances the instruments to become a highly sensitive fixed area monitor



PDS-GO on its cradle, upper display



PDS-GO front display



PDS-GO with belt clip

