



PDS-100G/GN

Spectrometric Pocket Radiation Detector

OVERVIEW

The PDS-100G and PDS-100GN are gamma and gamma/neutron radiation detectors. These sensitive pocket-sized devices are designed to detect, locate and quantify any radioactive materials as Special Nuclear Materials or as Radiological Dispersal Devices (RDD), in a very short time. The PDS-100G and GN feature the capability to transmit the measurement and the spectrum on request.

They have been designed specially for First Responders, Law Enforcement, Customs Inspectors and for Personnel and Site Security in critical infrastructures.

KEY FEATURES

- Gamma / neutron independent channels
- High sensitivity and fast response time
- Visual, audio and vibration alarms
- Wireless communication interface
- Small, rugged, compact, user-friendly
- Designed to meet/exceed ITRAP and ANSI standards

VERSIONS

- PDS-100G/ID: Gamma version
- PDS-100GN/ID: Gamma and Neutron version



FUNCTIONAL FEATURES

- Designed for ANSI 42-32, IEC 62401 standards, ITRAP/IAEA recommendations
- Two main operating modes : «Detection» and «Search» with specific response time and display configuration
- Independent Gamma/neutron «Detection alert» and «Danger Alarm» signaling (latched)
- Silent alarms (vibration, earphone)
- Spectrum acquisition with multi-channel analysis (MCA)
- Easy-to-read display (OLED technology) for user's interface
- Capability to record measurements for future analysis
- Wireless communication using IRDA and Bluetooth® technology
- Tri-band GSM option



NUCLEAR CHARACTERISTICS

- Detectors:
- Gamma: CsI (TI) 9 cc
- Neutron: LiI(Eu)
- Energy range:
- Gamma: >35 keV
- Neutrons: 0.025 eV to 14 MeV
- Gamma dose rate display: 0.01 μ Sv/h to 100 μ Sv/h / 1 μ R/h to 10mR/h
- Gamma count rate display: 0 to 99999 cps
- Neutron count rate display: 0 to 999 cps
- Gamma alert response time: for a 50 μ R/h increase (Am, Cs, Co) in 10 μ R/h background: <1 sec.
- Neutron alert response time: mean time to detect 20000 n/s Cf252 at 10 cm: <2 sec.

ELECTRICAL & MECHANICAL CHARACTERISTICS

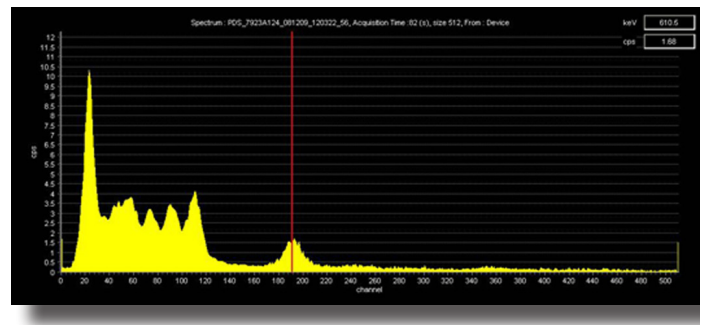
- Batteries: 2x AA (Alkaline, Li-FeS2 or Ni-MH)
- Battery Life time: typical 100 hours
- Dimensions (l x w x h): 123 x 74 x 43 mm (4.80 x 2.9 x 1.7 in)
- Weight: 300 g (10.3 oz) with battery

ENVIRONMENTAL CHARACTERISTICS

- Temperature range: -20°C to 50°C (-4°F to 122°F)
- Humidity: 95% at 35°C (95°F)
- EMI, shock, vibration, drop and water resistant

ACCESSORIES

- PDSmass software for remote display, spectra and historic retrieve, parameters settings
- SMI software for spectra analysis and identification
- Silicon protection
- Belt clip
- Pouch with belt clip
- External power supply / battery charger
- Earphone



Radium spectra (with PDSmass)