

# PDS-100G/GN

## Pocket Radiation Detector & Search



### FEATURES...

- gamma/neutron independent channels with spectrum acquisition
- high sensitivity and fast response time
- visual, audible and vibration alarms
- wireless communication interface
- small, rugged compact and user friendly
- designed to meet/exceed ANSI and ITRAP standards



### PDS-100G/GN Pocket Radiation Detector & Search

The PDS-100G and PDS-100GN are the new generation of 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

## TECHNICAL SPECIFICATIONS:

### 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
  - Neutron: Li6
  - energy range (gamma): 35 keV to 1,8 MeV
  - energy range (neutrons): 0.025 eV to 10 MeV
  - gamma dose rate display: 0.01  $\mu$ Sv/h to 100 $\mu$ Sv/h / 1  $\mu$ R/h to 10mR/h
  - gamma count rate display: 0 to 99,999 cps
  - neutron count rate display: 0 to 999 cps
  - gamma alert response time: for a 50  $\mu$ R/h increase (Am, Cs, Co) in 10  $\mu$ R/h background: <1 sec.
  - neutron alert response time: mean time to detect 2.5 n/s/cm<sup>2</sup> Cf252 : <2 sec.

### Electrical & Mechanical Characteristics

- power supply: 2x AA batteries (Alkaline or Ni-MH)
- battery Life time: > 100 hours (with NiMH)
- dimensions (l x w x h): 123 x 74 x 43 mm /4.80 x 2.9 x 1.7 inches
- weight: 300 gr / 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

### Versions

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

### Accessories

- pouch with belt clip
- external power supply / battery charger
- earphone

