

Hand-Held Gamma/Neutron Detector



The **PM-1703GN** is a small handheld radiation detector with separate detectors for both gamma and neutron radiation. This small, lightweight, and very simple to operate unit is designed specifically for the detection of SNM. It comes equipped with a belt clip allowing hands free operation. For more severe environments, an optional nylon holster is available.

APPLICATIONS:

The PM-1703GN is designed to search for, detect, and locate radioactive and nuclear materials in a variety of situations. Due to the ease of operation, these units are ideal for Customs, Law Enforcement Officers, and other emergency services personnel.

SPECIFICATIONS

SENSITIVITY:

The device will detect:
Gamma: 5.0 μCi ^{137}Cs at a distance of 10" (25cm)
3.0 μCi ^{60}Co at a distance of 10" (25cm)
Neutron: 1000 grams of ^{239}Pu at a distance of 10" (25cm)
with the alarm threshold set to give a false alarm rate of 1 per 8 hours operation.

DETECTOR:

3.0 cubic centimeter CsI (TI) gamma scintillator
LiI neutron scintillator

ALARM LEVEL:

Configured using PC software from 0.1 to 9.9 sigma.

ALARM INDICATION:

Visual, audible tone and internal vibrator. These may be individually enabled or disabled

COUNT TIME:

Background time: 36 second.
Counting time: 0.25 second

DISPLAY:

Four digit LCD displaying gamma in $\mu\text{R/h}$, and 2 digit displaying neutron count in CPS, with back light.

COMMUNICATIONS:

Set-up and data exchange with a PC via IRDA.

DATA STORAGE:

900 alarm events are stored in non-volatile memory

POWER REQUIREMENTS:

Operates for 800 hours on a single "AA" battery.

DIMENSIONS:

3.5 x 2.75 x 1.25" (87 x 72 x 32 mm)

WEIGHT:

8 oz (230 grams) with battery.

ENVIRONMENTAL:

-22 to 122° F (-30 to 50°C)

SPECIAL FEATURES

Energy Range:

Gamma: 0.033 to 3 MeV

Neutron: Thermal to 14 MeV

