



Environmental
Instruments
Canada Inc.

CT007-N (NanoNuke)

Small, affordable, sensitive gamma radiation detector that connects to your phone.

Features

- Compact, lightweight, ergonomic
- Scintillation detector 20 to 200 times more sensitive than Geiger-Mueller tubes
- Low cost
- Single-button local operation
- Connects to GammaGuard by Bluetooth Low Energy (BLE)
- Rich user interface provided by smartphone display
- Can log data to the smartphone or to the RadResponder network

Introduction

CT007-N (NanoNuke) is a very small, yet highly sensitive radiation detector that fits into the smallest pocket, without pinching the wearer. It can connect to a smartphone via Bluetooth Low Energy (BLE). When connected to a phone, our GammaGuard app provides a rich user interface (UI). The user only interacts with the phone and CT007-N remains ergonomically out of the way in the user's pocket or at a remote location. This is ideal for covertly checking an area for radiation. The GammaGuard app can run in the background and alert the user of elevated radiation levels.

The GammaGuard app allows for time and date stamped data logging with GPS coordinates. The data can be logged to a file on the phone and it can (optionally) be logged to web based databases, such as RadResponder, facilitating a coordinated incident response.

The CT007-N has a small local display and can be used without a phone. It uses a CsI(Tl) scintillator and a silicon photomultiplier to achieve 20 to 200 times more sensitivity than Geiger tube based instruments of similar size.



Specifications

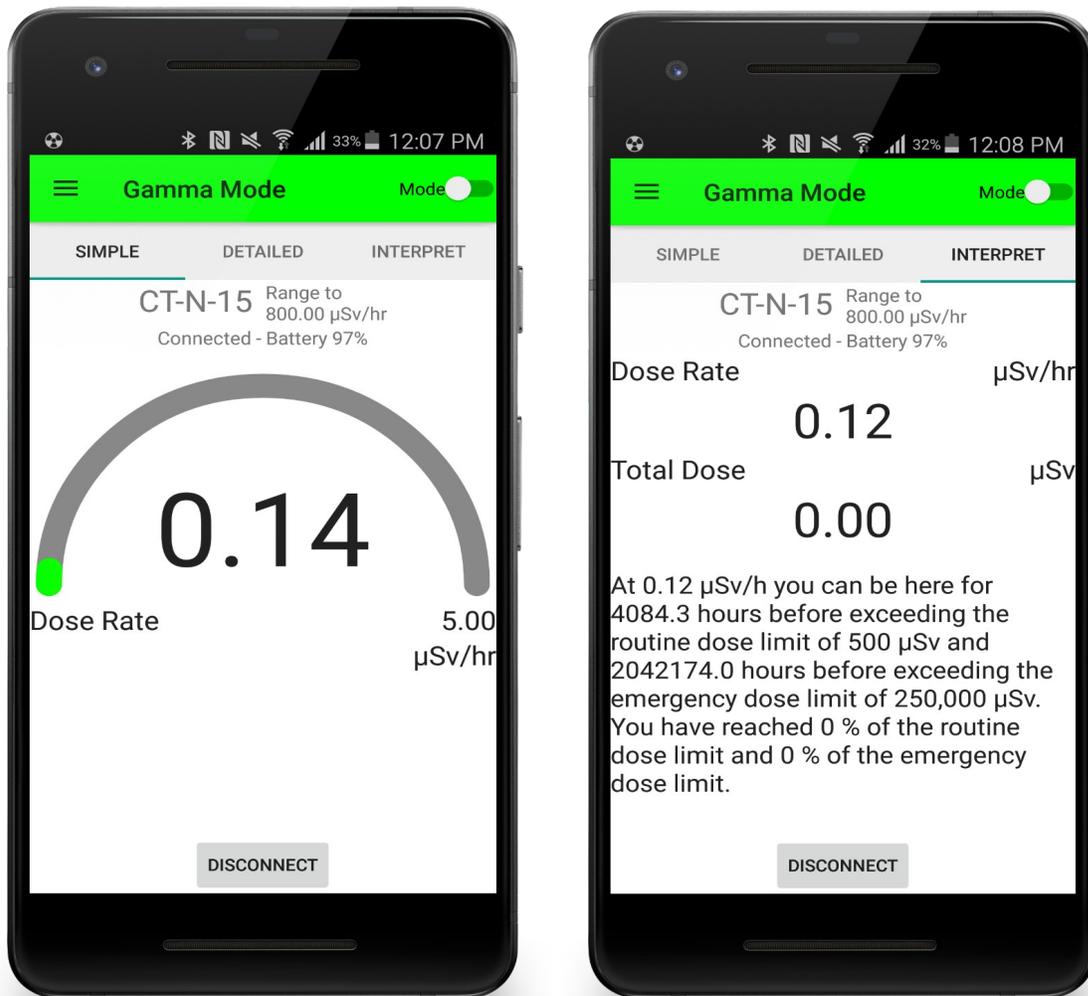
- Indicated Use:** Detecting and locating radioactive materials
- Detector:** CsI(Tl) scintillator and silicon photomultiplier
- Measurement Units:** User selectable (μSv , mRem or counts.)
- Sensitivity:** $\sim 1555 \text{ CPM}/\mu\text{Sv/h}$ (Cs-137)
- Range:** 0 to 1500 $\mu\text{Sv/h}$, 150 Rem/h, 2,000,000 CPM
- Resolving Time:** 15 microseconds
- Response Time:** User selectable from 1 to 30s or Auto. Display updates every second
- Energy Compensation:** Not Energy compensated. Will over-respond at low energy.
- Local Display:** 2.2 x 1.2 cm OLED. Font size automatically adjust to display as many digits as needed.
- Local Controls:** One push button – short press (<2s) to toggle screens; long press (>2s) to enter/exit Sleep mode
- Wireless Communication:** Bluetooth Low Energy connecting to GammaGuard.
- Batteries:** 2 standard AAA batteries
- Operating Time:** 300 hours connected to GammaGuard, 130 hours if using local display.
- Size:** 5 x 9 x 1.5 cm (2 x 3.5 x 0.6 in.)
- Weight:** 65 g (including batteries)

The GammaGuard System

The CT007-N, like many of our other CT007 series radiation instruments, connects to our GammaGuard app.

The GammaGuard App:

- Provides a large, easy to read display.
- Has the ability to interpret readings for non-technical users.
- Uses one consistent user interface across all our CT007 series detectors so that there is only one system to learn.
- Can automatically save data to a file and upload data to a central database, facilitating coordinated incident response.
- Will run in the background while performing other tasks.
- Alerts the user to elevated radiation levels, even when the app is not in the foreground.
- Displays the radiation level remotely when the CT007 series detector is up to 40 m away.
- Changes background from green to yellow to red to indicate low, elevated and high levels of radiation.
- Can connect to 2 of the same type CT007 detectors at the same time to determine the direction of a radiation source.



For more information
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