



Environmental  
Instruments  
Canada Inc.

## (CT007-S)

General purpose dose rate meter that connects to your phone

### Features

- Compact, Lightweight survey meter
- Low Cost
- Single-Button Local Operation
- Connects to GammaGuard by Bluetooth Low Energy (BLE)
- Uses the LND 713 GM tube
- Rich User Interface Provided by Smartphone Display
- Can Log Data to the Smartphone or to the RadResponder Network

### Introduction

The CT007-S is a small general purpose survey meter type instrument that fits into the smallest pocket, without pinching the wearer. It uses the LND 713 GM tube, which is one of the standard tubes for this type of instrument. Its compact form factor and long battery life make it a convenient and easy to use survey meter.

It can be used as a stand alone survey meter, with a simple one button interface, and an OLED display to show data. It also 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-S remains ergonomically out of the way in the user's pocket or at a remote location. 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.



### Specifications

**Indicated Use:** survey (dose rate) meter

**Detector:** LND 713 GM tube

**Measurement Units:** User selectable ( $\mu\text{Sv}$ , mRem or counts.)

**Sensitivity:**  $\sim 45$  CPM/ $\mu\text{Sv/h}$  (Co-60)

**Linearity:** Linear response to 5000  $\mu\text{Sv/h}$

**Resolving Time:** 58 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)

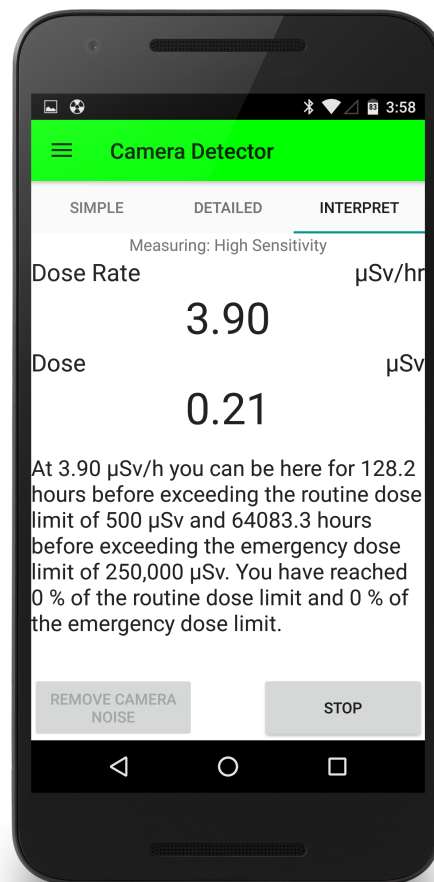
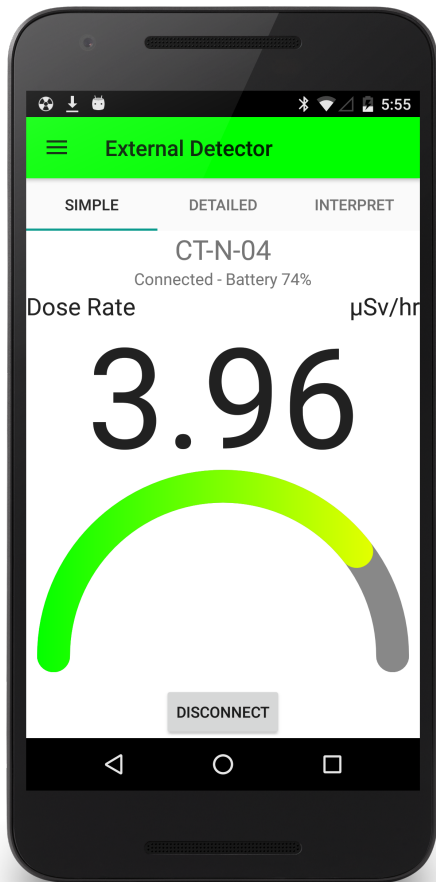
# The GammaGuard System

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

By itself, the GammaGuard app, installed on your smartphone, can provide basic radiation detection and warn the user of dangerous radiation levels, using only the phone's camera as a radiation sensor. Other more sophisticated or sensitive radiation measurement instruments, such as the CT007-S and Nano-Nukes can be wirelessly connected to GammaGuard.

## 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 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 external detector is up to 40 m away.
- Changes background from green to yellow to red to indicate low, elevated and high levels of radiation.



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