Environmental Instruments Canada Inc.

# CT007-Directional-M

2 Small microR Meters Configured as a Directional Radiation Detector

## Features

- Consists of two CT007-M microR Meters
- Each CT007-M has 19.4 $cm^3$ CsI(Tl) scitillator
- Compact and lightweight holder integrates two CT007-M and a smartphone
- Both CT007-M connect to GammaGuard by Bluetooth Low Energy (BLE)
- Rich User Interface Provided by Smartphone Display
- Rapid real-time radioactive source location analysis

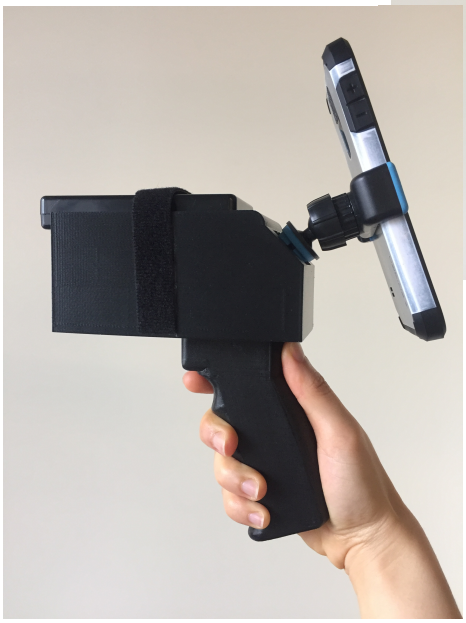
## Introduction

The CT007-M is intended for finding concealed sources of radiation. It features nearly twice the sensitivity of standard microR meters, based on a 1" NaI scintillator, at a much smaller size. By itself, the CT007-M is ideal for measuring low environmental levels of radiation such as for clean-up projects or mineral exploration.

When two CT007-M are connected to the GammaGuard app, the app can compute the direction of the radiation source by comparing the radiation levels detected by the two detectors. The result is plotted on a compass display on the phone.

A lightweight and ergonomic assembly combines the two CT007-M and smartphone for comfortable one-handed operation. The Smartphone provides a large display with access to a feature-rich menu. The phone's audio can be played through earphones for use in noisy environments.





## Specifications

**Indicated Use:** Measurement of low level gamma radiation. Finding sources.

**Detector:** Two CT007-M with 19.4 $cm^3$ CsI (Tl) scintillator and silicon photomultiplier

**Measurement Units:** User selectable (µSv, mSv, mRem or counts)

**Gamma Sensitivity:** [Cs-137] 33,000 CPM/µSv/h (330,000 CPM/mR/h) for each CT007-M

**Measurement Range:** 0 to 50 µSv/h, 5 mRem/h, 1,750,000 CPM

**Resolving Time:** 30 microseconds

**Response Time:** User selectable from 1 to 30s or automatic. Display updates every second

**Local Display:** 2.2 x 1.2 cm OLED. Font size automatically adjust to display as many digits as needed

**Local Controls:** Single push button. Short press to toggle screens; long press on/off

**Wireless Communication:** Bluetooth Low Energy connecting to GammaGuard

**Batteries:** 2 standard AA batteries for each CT007-M. 4 AA batteries are required

**Operating Time:** 1000 hours connected to GammaGuard, 300 hours with screen on

**Size:** 18 × 18 × 6 cm (7 × 7 × 2.4 in.)

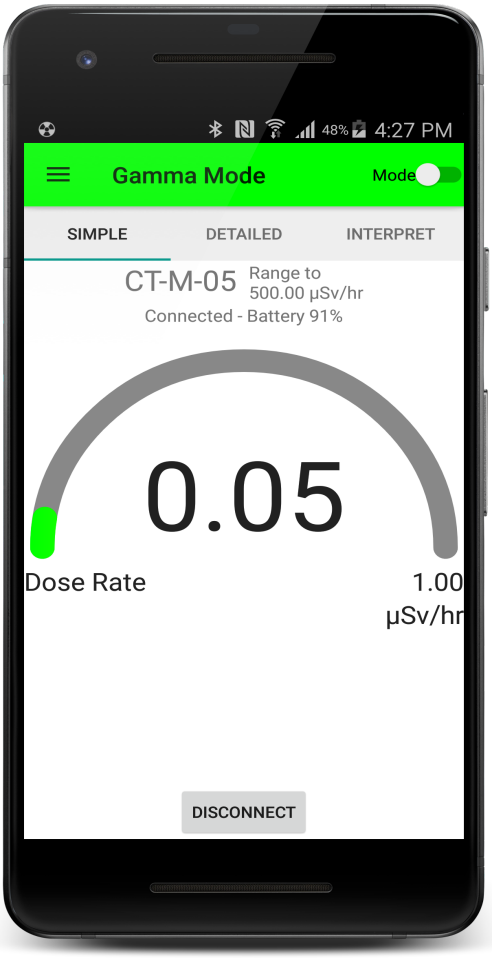
**Weight:** 850 g (including batteries and phone)

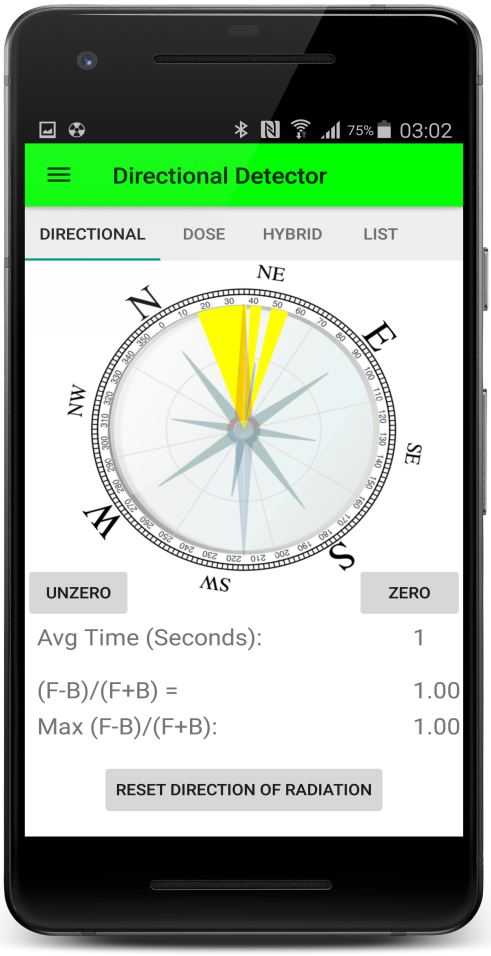
# The GammaGuard System

The CT007-Direction-M, like many of our other radiation measurement 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 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 when the CT007 series detector is up to 40 meters 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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