The **RC2**\(^{PLUS}\) was designed specifically for any application where sensitivity and detection capability must be extremely high even in high backgrounds. The **RC2**\(^{PLUS}\) portable radiation detector utilizes advanced spectral techniques to enhance sensitivity for reliable detection of isotopes with extremely low Dose Rates. The **RC2**\(^{PLUS}\) Advanced is an upgrade option from the **RC2**\(^{PLUS}\) Basic Total-Count version. The Basic version tracks the total count rate produced by all of gamma energies during the scanning period and automatically sets an alarm threshold over the background count rate average. The Advanced ROI Analyses versions allows the operator to see the distributed of measured radiation energies in a histogram where specific Regions Of Interest (R.O.I.) can be selected for desired energy ranges applicable to the requirement. Once the R.O.I. ranges are selected, a specific alarm threshold can be set for each R.O.I. This unique technology provides extremely high sensitivity while decreasing the adverse effects caused by ambient background radiation. The **RC2**\(^{PLUS}\) provides additional features such as the display of detected energy response in a histogram form, data storage, selected R.O.I. count rate viewing, Dose/Exposure Rates.

The **RC2**\(^{PLUS}\) stores operator selected results in a histogram record which can be downloaded via USB to RadComm’s PC RADV\(\text{VIEW}\) software for further analysis and archiving. Reports can also be saved in PDF format for emailing and/or printing. Remote servicing/diagnostics and software updates of the **RC2**\(^{PLUS}\) can be achieved via a network utilizing the RADV\(\text{VIEW}\) software application.

The **RC2**\(^{PLUS}\) utilizes a large internal, high grade PVT detection medium with high Dose GM Tube and state-of-the-art electronics to maximize detection capability for high energy Beta, X-Rays and Gamma Rays. The **RC2**\(^{PLUS}\) also incorporates a high speed micro-controller with high resolution backlight LCD. The LCD can be switched between Day/Night time colors depending on the ambient light conditions. On a continuous basis system operation is monitored in order to maintain consistent optimum performance.

The **RC2**\(^{PLUS}\) is equipped with an internal rechargeable battery pack that eliminates the need for stocking and changing conventional batteries. In the event that radiation is detected a varying audio tone along with a vibrating handle will activate to help locate the source of radiation.

SPECIFICATIONS:

Size:
- Detector Dimensions
  - 7” H(18cm) x 8-1/4” L(21cm) x 4” W (10cm)
- System weight: 3.4lbs (1.5kg)
- Detector Case: Durable plastic with protective silicone sleeve

Electronics:
- Integral PMT with EM Shielding
- Audio & Visual Alarm with Vibration
- Stable Low Noise, High Voltage Power Supply
- Battery: Internal Lithium Ion with charge indicator
- Battery Life: up to 9 hours
- Battery Recharge Time:
  - Wall charger: 2.5 hrs
  - PC USB: 6 hrs (estimated)

Environmental:
- Operating Temperature: -20ºC (-4ºF) to +60ºC (140ºF)
- Shock resistance: Complies with ANSI N42.34

Display:
- Backlit RGB colour LCD 320x240 resolution
- Viewing area: 2.7”(7cm) x 2.1” (5.3cm)
- Basic: selectable units of measure: (CPS, uSv/h, uR/r)
- Advanced: Histogram format

Software for Advanced:
- Menu Driven User Interface
- Configurable Data Storage with Backup
- Emailing capability (with network connection)

Detector Specifications:
- PVT (Basic & Advanced): 4” x 3” x 2” (101.6mm x 76.2mm x 50.8mm)
- GM Tube (Advanced only), 0.59” x 1.9” (12mm x 45mm)
- Dose Rate Range, Basic: 1 uR/Hr - 10 mR/Hr (10nSv/hr to .1mSv/hr)
- Dose Rate Range, Advanced: 1 uR/Hr - 10R/Hr (10nSv/hr to 100mSv/hr)

Response/Sensitivity
- Energy Range: 30 KeV – 2.0 MeV
- Gamma histogram:
- 256 Channels, channel capacity 16 bits

RC2PLUS Basic vs Advanced

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<thead>
<tr>
<th>Feature</th>
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<th>Advanced Option</th>
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<tr>
<td>Search/Find</td>
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<td>Total Counts</td>
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<td>ROI Alarm Threshold Settings</td>
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<td>Accumulated Dose</td>
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RC2PLUS - Docking Station (Optional)
- Docking Station charges RC2PLUS instrument
- Provides Area Monitoring while the RC2PLUS is docked
- Audio and Visual alarm with reset button
- Wall mounted with security lock
  - Weather Resistant Enclosure IP54 (Nema4) (305H x 254W x 190 D mm)
  - 25mm dia. Alarm LED
  - 25mm dia. Operational Status LED
  - 87-240 Vac 50/60 Hz/24V DC @ 500mm Input Power
  - Momentary Reset Button Internal Charger for RC2PLUS portable