

# RADON NORTH

*Exclusive Canadian Radon Measurement Products Representative of  
Rad Elec Inc.*

## Recon Continuous Radon Monitor



The Recon is specifically designed with ease of use by the radon professional in mind. Rugged construction, EMI shielding, extensive ground-planing on circuit boards, and near-MIL-spec grade precision SMT components assure years of accurate, trouble-free radon measurements. Radon measurement is performed by an independent alpha particle detecting photodiode within each of two electrically conductive ionization chambers (essentially Rad Elec patented L chambers). Comparator and discriminator circuitry analyse the signals from each chamber - rejecting noise and spurious outputs, resulting in a Rn measurement sensitivity of 35 cph per 100 Bq/m<sup>3</sup> radon-in-air concentration. Additional on-board sensors provide temperature, % relative humidity, barometric pressure & tamper indicating monitoring. The Recon can be operated from line voltage, batteries or a connected battery pack. The operating software allows the device to be configured to operate in SI (metric) or conventional (Imperial) units of measure.

Each Recon is shipped with two keys for operation; Recon operation, data management, graphing and report generating software; Recon User's Manual (on USB drive); AC adaptor and micro USB cable.

### Application:

- continuous indoor radon concentration measurements

### Features:

- dual electrically conductive ionization chambers, each with an independent alpha particle detecting photodiode
- temperature, % relative humidity, barometric pressure & tamper indicating monitors
- large, easy to read display with backlight
- micro USB port for data transfer & external battery pack
- rugged construction & shock-absorbing rubber bumpers
- universal 1/4" tripod mount

# Recon Continuous Radon Monitor

## Specifications:

<p><b>Physical</b></p> <p>Dimensions . . . . . 120.7 mm x 171.5 mm x 65.1 mm (4.75" x 6.75" x 2.56")</p> <p>Material (body) . . . . . high impact ABS (features protective rubber bumpers)</p> <p>Mass . . . . . 848 g (30 oz.)</p> <p><b>Radon Sensors</b></p> <p>Dual 60 ml (volume) Ionization Chambers (feature independent photodiodes for alpha particle detection)</p> <p>Measurement Range . . . . . 7 Bq/m<sup>3</sup> to &gt;100 kBq/m<sup>3</sup> Lower Limit of Detection (LLD) . . . . . ~ 22 Bq/m<sup>3</sup> Calibration Factor . . . . . 35 cph / 100 Bq/m<sup>3</sup> Minimum Detectable Rn Concentration . . . . . ~ 9 Bq/m<sup>3</sup> % Error (typical)</p> <p><b>Other Sensors</b></p> <p>Temperature: . . . . . -40°C to 85°C ± 3°C % Relative Humidity . . . . . 0% to 80% RH ± 4% RH Barometric Pressure . . . . . 20 kPa to 110 kPa ± 0.4 kPa (abs), ± 0.1 kPa (rel) Tamper Indication . . . . . X, Y, Z axial acceleration monitor</p> <p><b>Typical Operating Conditions</b></p> <p>Temperature . . . . . 0 to 40°C (32 to 104°F) Relative Humidity (non-condensing) . . . . . to 85% Barometric Pressure . . . . . normal atmospheric ranges Mechanical Shock . . . . . withstands typical transport shock</p>	<p><b>User &amp; I/O Interface</b></p> <p>Backlit Alpha-Numeric LCD 5 Push-button Function Switches . . . backlight &amp; setup Operation Mode Key Switch . . . . . OFF, I/O &amp; RUN Micro USB . . . . . data transfer &amp; battery pack power</p> <p><b>Power Supply</b></p> <p>Internal Rechargeable Battery 4.8 VDC, 2300 mA NiMH 96-hour life between charging AC Adaptor . . . . . 100 - 240 VAC, 50 - 60 Hz Output . . . . . 12 VDC, 1.25 A (nom.) Barrel Connector . . . . . 2.1 x 5.5 x 11 mm center (+) (0.08" x 0.22" x 0.43")</p> <p><b>Available Accessories</b></p> <p>Deployment Tripod . . . adjustable height (up to 1.5 m) Carry Case . . . . . cushioned, high-impact ABS</p> <p><b>Evaluated/Utilized By:</b></p> <p>Canadian National Radon Proficiency Program; Canadian Nuclear Laboratories; U.S. National Radon Proficiency Program; and U.S. National Radon Safety Board (Device Code #31823).</p>
--	--

## Ordering Information

To order, contact Radon-North  
22 Wrenwood Place  
Kitchener, ON  
Canada N2A 4C7

E-mail: [radon-north@gto.net](mailto:radon-north@gto.net)

Phone: (519) 603-1850

Website: [www.radonnorth.com](http://www.radonnorth.com)