

Canadian National Radon Proficiency Program

2023 Intercomparison Report

Radon levels vary from day to day and week to week. Although the electronic monitors listed here provide results quickly, it is important to leave them in place for at least 3 months to get an accurate representation of your average radon level. Short-term radon measurements can be misleading (either much lower or much higher than your actual average radon level).

Follow these guidelines when testing your home for radon:

- Place your radon monitor in a room that is occupied for at least 4 hours each day. For detailed instructions on placing your radon monitor, <u>click here</u>.
- Test your home for a minimum of 3 months, preferably during the heating season when indoor radon levels are typically the highest.
- If you only have access to a digital monitor for less than 91 days, we recommend that you follow up with a long-term radon test. You can find a list of online retailers here: <u>https://takeactiononradon.ca/test-for-radon/radon-test-kits/</u>
- Consider the long-term average radon level when deciding whether to mitigate your home. Electronic radon monitors each have a different method of averaging the data; we recommend you read the manufacturer's user guide to determine how to read the longterm average radon level.

Over the past few years, electronic radon monitors have become increasingly available and popular with consumers. In order to provide Canadian consumers with an unbiased performance-based comparison of these monitors, the Canadian National Radon Proficiency Program (C-NRPP) regularly conducts a series of performance tests. Details of the tests can be found here.

The table below summarizes the different devices that have been tested. These devices cannot be professionally calibrated and are not approved by C-NRPP for use by radon measurement professionals.



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2023 Consumer Grade Electronic Device Report

		Manufacturers stated Accuracy	Frequency of Reading	Digital Display or cell-phone app	Battery or Plug-in	Passed C-NRPP Performance Test <u>For more</u> <u>details click</u> <u>here.</u>
ANT-MUSE ANT-MUSE ANTI-MUSE AN	Airthings Corentium Home	±10% (after 7 days at 200 Bq/m ³), ±5% after 2 months of monitoring	12 hours 24 hours 7 days (first reading will take 24 hrs)	Short-term and long-term average shown on monitor display.	Battery	\checkmark
O	Airthings Wave Plus	±10% (after 7 days at 200 Bq/m ³), ±5% after 2 months of monitoring	Hourly	Long-term average shown on cell phone app. Color-coded indication of levels on monitor.	Battery	\checkmark
2.4 637 Train Gain	Airthings View Plus	After 30 days at 200 Bq/m ³ , ±10% on the 7 day average and +/- 5% on the 2 month average	Hourly	Short-term average shown on monitor display; long-term average shown on app.	Battery or plug in (USB- C)	\checkmark
	Ecosense EcoQube	+/-10% at 370 Bq/m³ after 10 hours	Measures every 10 minutes and displays an hourly rolling average.	Hourly level shown on display, long term average available on the app.	Plug in	\checkmark
253°	Ecosense EcoBlue	+/-14% at 370 Bq/m ³	10 mins	Device displays 1 hour, 1 day, 1 week and 1 month rolling averages.	Plug in	\checkmark
Annual Annua	Ecosense RadonEye RD200	±10% at 370 Bq/m ³ after 10 hours	10 mins	Displays 1 hour rolling average; long-term display on app.	Plug-in	\checkmark
	SunRadon Luft	±10% (after 7 days at 200 Bq/m³)	Initial reading takes 90 mins, hourly.	Long-term and short- term averages shown on the app. Color coded indication of levels on monitor display.	Plug-in	\checkmark



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The following devices are not recommended by C-NRPP

Air Steward	Radon Monttor	Check out the recall at: Air Steward: <u>https://recalls-</u> <u>rappels.canada.ca/en/alert-recall/air-</u> <u>steward-portable-radon-monitor-recalled-</u> <u>due-inaccurate-radon-detection</u>
Radon Guard	Radon Guard Comp Treas Annual Benef Treas Annual Line DEPT	Check out the recall at: Radon Guard Monitor <u>https://recalls-</u> <u>rappels.canada.ca/en/alert-recall/health-</u> <u>canada-warns-elifecity-portable-radon-</u> meter-may-post-health-and-safety-risk-0

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