

TRIATHLER

TRIATHLER BECQUEREL FINDER

Triathler Becquerel Finder is optimised for detection of radioactive isotopes in the event of a nuclear emergency

Nuclear emergency response

Triathler Becquerel Finder offers a convenient counting solution for detection of radioactive isotopes released in a nuclear accident. The instrument is equipped with an external NaI(TI) detector with enlarged lead shield which facilitates the use of Marinelli beakers with total sample volume of 1L. This enables rapid detection of I-131, Cs-134 and Cs-137 in foodstuff, water and milk.

Optionally, a standard Triathler Liquid scintillation counter can be equipped with the Triathler Becquerel finder detector. This combination provides a useful tool for detection of both alpha, beta and gamma emitters.

Detection of beta emitters with the Triathler

Water and swipe samples can be measured easily. In emergency response Sr-90 is an important isotope. Triathler has been employed in several studies to measure Sr-90 from water, urine or nasal swab samples. When sample preparation chemistry is available, food and soil samples can also be measured.

Detection of alpha emitters with the Triathler

Triathler LSC is also suitable for detecting alpha emitting isotopes. Triathler has been used in several publications and studies for especially Am-241 screening in an emergency setup. Triathler LSC and MLT are available with the optional alpha/beta separation that provides extremely sensitive instrument for alpha emitters. Applications vary from measurement of water to urine and even nasal swabs.

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Advantages

- · Simple operation, the user selects the nuclide by name and presses the "start" key, the instrument does the rest
- 15 keV .. 1000 keV energy range, 1000 channel MCA
- Stand alone or connected to a PC
- 50 x 50 mm NaI detector planar type
- · Background shield 40 mm of lead
- Single or dual label counting with spillover correction Spill over correction can be made in PC
- 32 character alphanumerical display
- RS-232 connection
- Preset nuclides:I-131, Cs-134 and Cs-137
- Detection limit 20 Bg/L Cs-137, 5 minutes counting time
- The Becquerel Finder can be connected with Triathler LSC for combined alpha and beta detection



- Control unit: H 190 mm, D 330 mm, W 250 mm, weight 6 kg
- Lead shield: H 400 mm, W 240 mm Weight 105 kg

Power input: 12V DC, 3 A or 100 .. 240 V AC, 50/60Hz

Ordering information

For Gamma emitters

Code No	Item		
425-011	Triathler E	Becquerel	Finder

For Alpha, Beta and Gamma emitters

Code No	Item
425-034	Triathler Liquid Scintillation Counter
431-043	External Bq detector
431-042	Enlarged lead shield for external detecto
525-001	Alpha/beta separation







