Hidex Triathler

Liquid Scintillation Counter and Gamma Counter







Instant results whenever and wherever with this compact and portable counting system

The Hidex Triathler is a single sample counter which provides fast and accurate results for several life science and environmental applications. It can count all radioisotopes including tritium in a variety of sample formats.

Due to its very small size and light weight, Triathler can be taken into the field to measure samples on the spot. Although small, Triathler has many advanced features such as spectrum analysis using a multichannel analyser (MCA), instant DPM results, single-photon luminescence counting, and optional PC control and data transfer.



Easy to Use

A keypad allows single key operation for immediate results using preset protocols for any isotope.

Flexible

The Triathler is suitable for just about any beta radiation, gamma radiation or luminescence application and accepts most types of vials and sample formats.





Portable

The Triathler's small size and light weight make it ideal for personal use on a benchtop or for on-site field/sea measurements.

Sophisticated

Triathler has advanced features such as a built-in multi-channel analyser, optional alpha-beta separation electronics, and connectivity to a PC for instrument control and data export.

Triathler in Monitoring

Wipe Tests

Triathler provides fast and reliable results for regulatory wipe tests in lab areas.

Water Measurements

Triathler has alpha-beta separation capabilities which makes it ideal to detect alpha-isotopes like Radon (²²²Rn) in water. It is also sensitive enough to perform monitoring of ³H in discharge water used at power plant sites.

Soil Measurements

Used in conjunction with recognised extraction techniques, Triathler can measure soil samples for contamination with any radioisotope.



Triathler in Life Sciences

Molecular Biology

Triathler is well suited for metabolic studies, genetic studies, cell proliferation assays, receptor-ligand assays, and other applications in biosciences. For example, using the optional plastic scintillator adapter (PSA), ³²P can be measured non-destructively (without cocktail).

Marine Biology

Triathler is commonly used to measure growth of phytoplankton in seawater and lakes by measuring uptake of ¹⁴C.

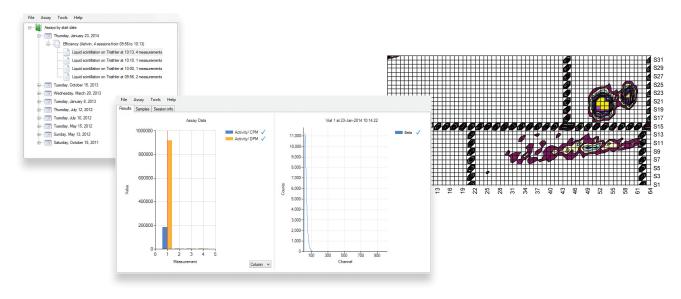
Emergency Response

Triathler is well suited for in-field emergency response, e.g. detecting rapid alpha measurements such as ²⁴¹Am as well as ¹³⁷Cs and ¹³¹I. The external NaI detector can accommodate up to 1 L Marinelli beakers* to measure food, soil, and liquids (water, milk, etc.) for gamma contamination.

* Only available with the Becquerel Finder model of Triathler.

Research

Triathler is ideal as an easy-to-use diagnostic tool in research for detection of beta and gamma isotopes, such as 125 I, 18 F, 137 Cs, 57 Co, etc.



Basic Specifications

Size 33 (L) x 25 (W) x 19 (H) cm

Weight 9 kg

Power 110 - 240 V AC, 12 VDC

Sample Types LSC Vials, Microtubes, Test Tubes

Detector Single-Photon Counting PMT

Display 2 x 16 character alpha-numeric LCD

Energy Range 2 keV - 2,000 keV

Counting Time 0.1 seconds - 99999 minutes

Output RS-232C/USB to PC

Please refer to the Technical Specification Sheet for further information

Specifications – Liquid Scintillation Counting

Sample Types LSC Vials, Microtubes, Test Tubes

Maximum Count Rate 2,000,000 CPM

Betα Efficiency Up to 45% for ³H

Direct ³²**P Efficiency** Up to 75% in PSA Tube

Specifications – Gamma Counting

Sample Types Tubes or Vials (up to 13 mm diameter)

Detector 32 x 32 mm NaI (TI) crystal (through-hole)

Background Shield 10 mm lead

Specifications – External Gamma Counting

Sample Types LSC Vials, Microtubes, Test Tubes, Marinelli Beakers*

Detector 50 x 50 mm NaI (TI) crystal (planar type)

Background Shield 30 or 50 mm lead

*Only available with the Becquerel Finder model of Triathler





Service and Support

Users of our systems can benefit from our comprehensive, fully inclusive service and support.

We provide complete service and support for all of our customers to give reassurance that if things go wrong or you need expert advice, help is only an e-mail or phone call away.



Validation Services

Our Validation Service enables you to implement and get maximum value from your investments as soon as possible.

We work as a partner with your Quality Manager, System Manager and users to provide a tailored Validation Plan suited to your needs. Our Validation Specialists incorporate years of experience in GLP system validation, detailed knowledge of our systems, together with other industry standard systems to help you meet your company's requirements.



Training

LabLogic can provide a variety of training courses and workshops to help you get the most out of your instrument and software.

All training is performed by our expert Product and Support Specialists who have many years experience in the development and use of the instruments and software.

Certificates can be provided to compliment your internal GLP training records.

Related Products

Hidex 300 SL



Hidex Sense



Hidex **AMG**











Consumables



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