# Hidex **300 5L**

Liquid Scintillation Counter







The most advanced transportable and user friendly LSC on the market

The Hidex 300SL is a revolutionary instrument which incorporates the most advanced technology available, triple-to-double coincidence ratio (TDCR) counting.

# **Compact and Transportable**

The 300 SL has a modern and compact design measuring half the size and weight of some of its long standing rivals. It is therefore much easier to fit it into smaller, more space conscious laboratories, such as transporting in research vessels or mobile labs.

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# **User Friendly Software**

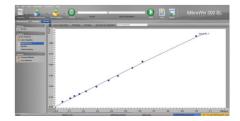
The 300 SL uses an external PC which is Windows 7 and 8 compatible, enabling several users to transfer their method and data files to other offline or networked PC's.

The MikroWin 300 SL software features an easy-to-use graphical interface and advanced data reduction capabilities. An unlimited number of protocols, easy export to Excel™, custom calculations and quench curves are all included. MikroWin also has options for 21 CFR Part 11 compliance for secure handling of method and data files.









# **TDCR Technology**

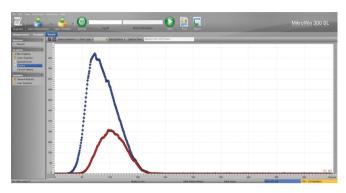
The 300 SL utilises a unique design with three photomultiplier detectors aligned 120 degrees from each other, which offers superior efficiency and counting results for both advanced research and environmental work.

In addition, the 300 SL can be used in triple coincidence mode only, which removes interference from chemiluminescence and the need to dark adapt. The counter can also be operated in dual coincidence mode using conventional standards and quench correction methods.

Quench curves can be generated and stored within the MikroWin software, which can be automatically applied or manually fitted to recalculate previous data.

#### No internal or external standard source

The TDCR method allows easy determination of sample counting efficiency without the use of any internal or external standard source of radioactivity, offering many benefits for the modern lab including no hidden disposal costs, no health hazard when servicing, and no transportation restrictions.



Advanced spectrum analysis highlighting triple and double count spectrums for each sample.

#### Lead Shutter

Reduces cosmic radiation.

# Optimal Lead Shield Design

A minimum of 70 mm lead in all directions provides excellent shielding and minimises instrument weight.

# **Copper Shielding**

Eliminates X-rays from lead shield.

# Robotic Loading Arm

Removes the need for a complex elevator mechanism, preventing jams, and is easily serviceable.

### **No Source Required**

Elimintating hazards and cost without compromising results.

#### Measurement Chamber

Highly reflective proprietary paint maximises photon detection.

#### **PMTs**

Three PMTs detectors in coincidence mode provide optimal counting geometry and facilitate TDCR calculations.

# **Super Low- Level Model**

Similar to the standard instrument the Hidex 300 SL super low-level scintillation counter is equipped with additional lead shielding, low level PMT detectors, and an active guard detector for further background reduction.

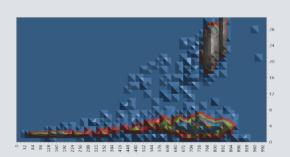
Ideal for 3H in water measurements, other low-level environmental monitoring, radiocarbon dating and biofuel verification.

#### **New Active Guard**

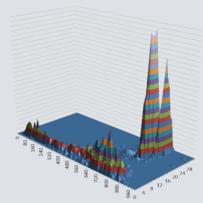
The Active Guard is a separate scintillator detector which measures and subtracts real-time background radiation. The guard can be turn off for high energy samples and does not interfere with alpha/beta separation.

# 300 SL Options

- Alpha/Beta Separation Module
- Temperature Control Module
- Low-Level PMT Detectors
- Digital Lead Shield
- External EU-152 Standard







2D/3D spectral separation of alpha's from beta's based on pulse length.

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| Specifications         |   |  |
|------------------------|---|--|
| Size                   | 63 (L) x 52 (W) x 68.5 (H) cm                                     |  |
| Weight                 | Standard Model: 130 kg<br>Super Low Level Model: 180 kg           |  |
| Electrical Connections | 100 - 240 V 50 - 60 Hz  |  |
| Energy Range β's       | 0 - 2,000 keV   |  |
| Energy Range α's       | 0 - 10,000 keV  |  |
| Efficiency             | H-3 unquenched 68 - 72%<br>H-3 (8 mL water, 12 mL cocktail) > 30% |  |

 $\alpha$  's (Po-210, U-234/U238, Am-241, Rn-222, Ra-226) >95%

C-14 unquenched 96 - 98%

Please refer to the Technical Specification Sheet for further information

# 600 SL Automatic TDCR Liquid Scintillation Counter

Designed to meet the needs of laboratories processing large quantities of samples, the new Hidex 600 SL is a high throughput automatic TDCR liquid scintillation counter.

#### **Proven technology**

The Hidex 600 SL uses the robust and unique triple-to-double coincidence ratio (TDCR) counting technology from the successful 300 SL series. Coupled with added sample capacity for up to 500 small vials (or 210 large vials), the 600 SL can process samples at a rate which will satisfy even

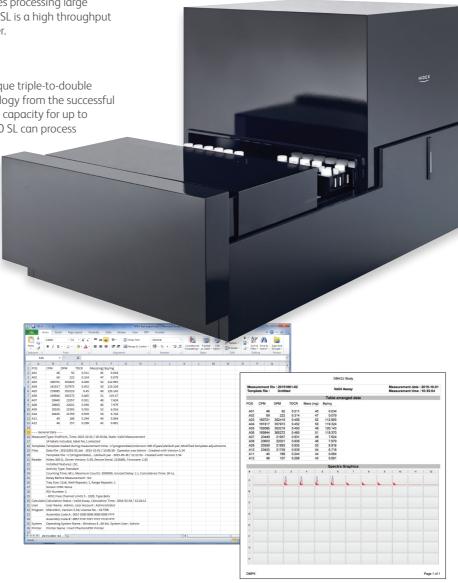
The instrument's software allows the user to work with an unlimited number of method files. Methods are barcode

the most demanding laboratories.

identified for automatic processing. Data files can be automatically exported in Excel,® csv or text for integration into LIM systems.

#### **Optional Features**

The Hidex 600 SL is available with all the options of the standard model, such as powerful alpha/beta separation, low level PMT detectors, cooling unit, and internal Eu-152 reference source.



| Specifications               |                              |
|------------------------------|------------------------------|
| Size                         | 125 (W) x 69 (H) x 64 (D) cm |
| Weight                       | 200 kg                       |
| Sample Capacity (20 mL/7 mL) | 210/500                      |
| Background (CPM)             | 12 (H-3 in water)            |
| Counting Efficiency (%)      | H-3 >70%<br>C-14 >96%        |



# 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**

























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