HERM LB 500 SOFTWARE

Easy-to-use software for maximum productivity

HERM Controller

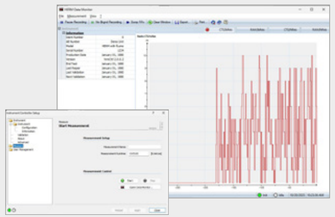
The HERM Controller is the software interface to the instrument. It controls all functions and collects the data.

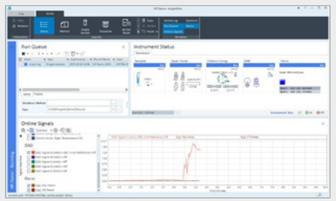
- **EASY DATA MANAGEMENT –** administrator log-in function enables simple control of instrument setup. Summary reports can be printed out for documentation purposes.
- **FLEXIBLE SOLUTION –** the external data viewer enables data visualisation without the need to install additional software.

Open Lab Driver

The OpenLab driver integrates the HERM seamlessly into the Agilent OpenLab CDS.

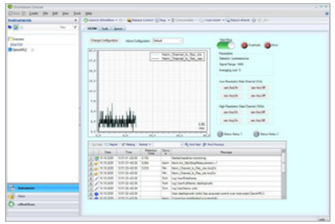
- **FULLY INTEGRATED -** All parameters and settings are handled through OpenLab CDS.
- **DIGITAL DATA TRANSFER -** All measurement data is transfered digitally. No limitations because of analog range limits. No expensive Analog to Digital conversion required.
- **DATA CONSISTENCY -** Raw data is transferred in addition to the processed data.





Chromeleon™ Driver

Chromeleon™ is known as a very versatile Chromatograpy software package supporting many different hardware solutions. Berthold has developed a driver to digitally control the HERM LB 500 through the Chromeleon™ user interface. The driver is fully certified and digitally signed by Thermo Fisher Scientific Inc. and runs with versions 6.x and 7.x.



TECHNICAL SPECIFICATIONS

Technical Specifications	
NaI-Detector	State-of-the-art ultra sensitive PMT coupled 1 inch NaI detector
*f*Lumo-Detector	Low noise photon counting 1 inch PMT
Communication Inputs Outputs	USB (mini USB connector) Start signal (contact closure) TTL signal output (raw data) analog signal 0-1V (16 bit resolution) 2 programmable relay outputs
Power Supply	6V DC (via wide range mains adapter)
Weight	electronics: 1 kg NaI detector: 2 kg lead shielding: 25 kg fLumo detector: 4 kg
Dimensions (W x H x D)	electronics: 210 x 60 x 120 mm NaI detector: 140 x 180 x 100 mm lead shielding: 150 x 350 x 180 mm fLumo detector: 225 x 150 x 130

Ordering Information			
Instruments	HERM LB 500 with NaI detector HERM LB 500 with fLumo detector (measuring cell required)		35144-01 35144-03
Accessories	fLumo detector only Single Cell Holder Lead brick (1 pcs) 200 x 100 x 50 mm		58785 53282 8506
Software	OpenLab driver Chromeleon™ driver		76917 58440
*f*Lumo PET measuring cells	MX 20-6 MX 50-6 MX 100-6	20 µl 50 µl 100 µl	58534 54421 61886
*f*Lumo luminescence measuring cells	Z 20-6M Z 50-6M Z 100-6M	20 µl 50 µl 100 µl	64345 58178 50147
*f*Lumo SzinTube measuring cells	ST 40-6M	40µl	66636

Chromeleon™ is a trademark of Thermo Fisher Scientific Inc.

Subject changes without prior notice

TRANSFORMING SCIENCE INTO SOLUTIONS

Berthold Technologies is a global leader in life science technology. Since 1949, scientists have trusted our comprehensive range of analytical system solutions, all proudly made in Germany. Our portfolio spans compact standalone instruments, such as luminometers, to specialized multimode readers, advanced imaging systems, and HPLC radio detectors. Our mission is to help create a healthier world, a safer environment, and more efficient manufacturing processes.

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HERM · Id.-Nr. 35144PR2 · Rev.01

HERM LB 500

Radio detector for HPLC

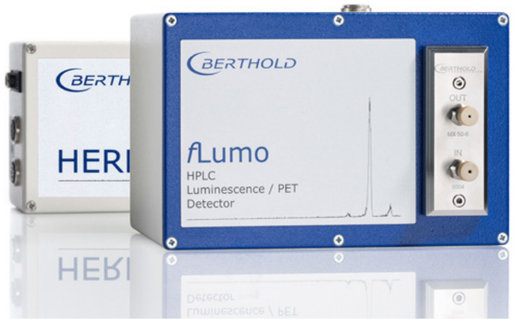
HERM LB 500

The perfect solution for radio HPLC in quality control

The HERM is a dedicated radio HPLC monitor enabling direct positron measurement, as well as beta and gamma isotopes detection in high activities e.g. in nuclear medicine or PET laboratories. Providing flexibility, reproducibility and sensitivity, the HERM offers a safe and user-friendly solution for quality control laboratories.

System features

- **DETECTOR FLEXIBILITY –** The HERM can be connected to different detectors. You have flexibility to choose the optimum detector for a specific application.
- **DUAL OPERATION MODE –** The HERM system can be installed in multiple distinct configurations, providing more flexibility and convenience. The comfortable stand-alone configuration provides an analog signal which can be easily integrated into an existing HPLC system. The system is equipped with a flash memory and a powerful CPU. Alternatively, the system can be installed in the PC-controlled configuration via a USB connection for digital data acquisition.
- **ADVANCED DOWNSTREAM CONTROL –** Two different threshold level based relays can be configured in the system to activate solenoid valves for fraction collection or waste valve control with delay if required.



Exchangable measuring cell.

Cell coil with variable volume.

Key benefits

- **SIMPLE INTEGRATION –** The HERM makes integration into your existing HPLC system easy so that everything works together to ensure consistent and reliable results. The PC connection can be established instantly via the USB port. By using the analog 0-1V output the HERM can be integrated into every HPLC system.
- **FUNCTIONAL DESIGN –** The instrument has been designed to avoid accidential parameter modifications eliminating manual adjustment knobs. All instrument parameters are controlled remotely. The power supply has been secured to avoid power failures even if the plug has been pulled by accident.
- **USER FRIENDLY –** The HERM LB 500 has been designed to be intuitive and easy to use to get you up and running quickly.
- **SENSITIVE BUT INSENSITIVE –** The sensitive detectors offer low detection limits. Lead shielding ensures low backgrounds even when there is high external radiation.

DETECTOR VARIANTS

Detector options to meet your application needs

NaI DETECTOR for gamma and high energy beta

- **HIGH-SENSITIVITY NaI DETECTOR –** The NaI detector option combines an extremely sensitive NaI detector with a compact shielding. Even low energy gamma isotopes like I-125 can be detected with high efficiency.
- **EASY OPERATION –** The twin cell changer enables the user to easily switch between two different cell volumes. If required by GLP regulations the cell volume can be fixed to just one volume using the optional single volume insert.
- **FLEXIBILITY –** standard tubing is used to create the flow cell volume. This provides maximum user-flexibility. In addition, changing cells has been simplified as much as possible.

fLUMO DETECTOR for Alpha, Beta and PET

- **BACKGROUND-FREE GAMMA AND PET MONITORING –** The use of specific measuring cells simplifies the measurement of high activity PET isotopes even in high background laboratories. A bulky and heavy lead shielding is not required as the system is insensitive to 511 keV gamma.
- **FLOW MONITORING ALPHA, BETA AND PET ISOTOPES IN HIGH BACKGROUND LABS –** The fLumo detector for HPLC systems uses a highly sensitive head-on photon counting detector with low background. Different measuring cells can be used to adapt for flow rates, activities and isotopes.
- **HIGHLY SENSITIVE ALPHA DETECTION –** A new, patend pending solid scintillator tubing technology is used, to detect alpha radiation directly, without the need of liquid scintillator. Besides that, beta and PET detection is possible as well.

NaI detector with optional single cell holder.

f Lumo detector with installed measuring cell.