

LabScout



The Lab Scout is a very easy to operate instrument to detect and quantify natural and artificial radionuclides in material samples. For standard operation procedure neither a computer nor special skills of the operator are required. On the other hand, the instrument can still be used as a flexible and powerful tool in the laboratory.

The high sensitive, temperature compensated 2 by 2 inch NaI detector with magnetic shielding offers an outstanding spectroscopic performance as well as a wide measurement range from 25keV to 3MeV. As an option, a two centimetre thick 360° lead shield is available. This will reduce the background radiation dramatically resulting in a lower statistical error and detection limit.

The included operation software for Windows computers allows an intuitive calibration just by a few mouse clicks using spectra of reference samples. In addition to the energy and peak width calibration an assistant for the efficiency calibration of any sample geometry is included. A number of calibration curves for standard sampling procedures (like Marinelli beaker) will be available to write them into the instrument.

You can create various nuclide lists of up to sixteen lines from an editable library with respect to your measuring problem. The acquired spectrum will be analysed for these lines by the advanced PSV (Peak Shape Verification) method. If a line becomes identified and verified, the weight-specific activity of the emitting nuclide will be calculated due to the integrated scale.



LabScout

Detector	Sodium Iodide with integrated PMT and high voltage power supply; scintillation crystal 2" x 2"; energy area: 25 keV – 3MeV; resolution < 7.5% (7% typ.) @ 662keV
Efficiency	net count rate: approx. 1100 cps / (μSv/h) based on Cs-137
Max. Count Rate	20.000 cps
Spectrum	1024 Channels
Measurement/Analysis	<ul style="list-style-type: none">• identification of up to 16 peaks (peak list)• creating various peak lists from an editable library• determination of weight specific nuclide activity
Stabilization	electronic stabilization of temperature; Peak-Pickup by PSV algorithm
Scale	0 ... 2.5 kg
Measuring times	1min; 5min; 15min; ½h; 1h; 4h; 12h
Data Storage	2 GB-SD-Card - more than 780.000 records
Usage/Display	1 Button; signal lights in red, yellow and green; display: 4x20
Acoustic Signal	80dB
Interface/Software	USB; Lab Scout Works (Analysis, Calibration, Configuration)
Environment	5 ... 35°C; 0 ... 95%
Power Supply	AC/DC adaptor; 12V/250mA
Dimensions/Weight	20cm /22cm/52cm (B/T/H); approx. 5.5 kg without lead shielding; with lead shielding approx. 68 kg

