



CURIEMENTOR® 3 Isotope Calibrator

*Isotope Calibrator for Radionuclide
Activity Measurement in
Nuclear Medicine*

Features

- ▶ Combines modern technology with user friendly, straight-forward operation
- ▶ Stores calibration factors for a wide range of isotopes
- ▶ Prints measuring results to an optionally available printer
- ▶ Features helpful functions as autostart, autoprint and autoreset
- ▶ Complies with IEC 61145¹⁾

The CURIEMENTOR 3 isotope calibrator is an instrument to measure the activity of radioactive isotopes as used in nuclear medicine and intravascular brachytherapy. It enables the user to select various measuring modes for vial and syringe measurement. Other applications include the calibration of nuclear medicine measuring equipment like gamma cameras or the brachytherapy seed measurement. Besides using state-of-the-art measuring technology, great importance has been attached to the design of the CURIEMENTOR 3 with respect to the needs of users. Working with radioactive material demands a high level of concentration, this must not be wasted by using measuring equipment complicatedly to handle.

The display and keyboard panel with its flat keys is specially designed for intuitive handling and easy cleaning in case of radioactive contamination. The 1.8 m connection cable makes it possible to place the ionization chamber behind or within a shield. The measured data can be printed on labels by a label printer (optional) and transferred to a computer for further data processing via the RS232 interface. The delivery includes a manual in English.

Ordering Information

L981108 CURIEMENTOR 3 isotope calibrator 100 V ... 230 V includes display unit, well-type ion chamber and liner
L971001 Radioactive check device ¹³⁷Cs (3.7 MBq)

Options

T33003.1.130 CURIEMENTOR lead shield
T33003.1.132 Additional CURIEMENTOR lead shield cap
T33003.1.140 CURIEMENTOR lead absorber to detect the molybdenum break-through
L991059 Label Printer DPT Companion Plus, 100 V ... 230 V

Specification

- ▶ Type of product CURIEMENTOR 3 microprocessor controlled radionuclide activity measuring system with gas-filled pressurized well-type ionization chamber
- ▶ Application Measurement of radionuclide activity in diagnostic and therapeutic nuclear medicine and in brachytherapy
- ▶ Measuring quantities Radioactivity (Becquerel Bq, Curie Ci)
Current (Ampere A)
- ▶ Measuring range²⁾
 - lower limit 0.1 MBq (¹³⁷Cs)
 - upper limit 195 GBq (¹³⁷Cs)
- ▶ Resolution²⁾ 0.001 MBq (¹³⁷Cs)
- ▶ Linearity ≤ 2 % acc. to IEC 61145¹⁾
- ▶ Reproducibility ≤ 5 % acc. to IEC 61145¹⁾
- ▶ Ion chamber gas Argon (10 bar)
- ▶ Chamber voltage 400 V
- ▶ Temperature (10 ... 40) °C, (50 ... 104) °F range
- ▶ Relative humidity (20 ... 75) %, max. 20 g/m³ range
- ▶ Air pressure (700 ... 1060) hPa range
- ▶ Interface Printer and RS232
- ▶ Power supply (100 ... 230) VAC, (50 ... 60) Hz
- ▶ Dimensions
 - Control unit 86 mm x 264 mm x 176 mm
(H x W x D) 3.39 in x 10.39 in x 6.93 in
 - Ion chamber
 - Height 329 mm, 12.95 in
 - Outer diameter 137.5 mm, 5.41 in
 - Depth of well 252 mm, 9.92 in
 - Diameter of well 61.5 mm, 2.42 in
- ▶ Weight
 - Control unit approx. 2 kg, 4.4 lbs
 - Ion chamber approx. 8.3 kg, 18.3 lbs

¹⁾IEC 61145: "Calibration and usage of ionization chamber systems for assay of radionuclides"

²⁾Resolution and measuring ranges are depending on the selected isotope. The values stated are examples only.