

Product Datasheet

CRC[®]-55tR

Dose Calibrator

The Capintec CRC[®]-55tR Dose Calibrator provides the speed and accuracy you need to measure and prepare doses with the reliability and performance you expect from Capintec. The CRC[®]-55tR's design includes a menu driven, colour touch screen interface that is easy to learn and use.

The ion chamber is one of Capintec's time-tested, high pressure well designs capable of measuring a dose as high as 6 Ci (250 GBq) with high accuracy.

Additional features such as USB/PC Communications, printer capabilities, ethernet software upgrades, plug and play chamber and expanded remote capabilities make the CRC[®]-55tR integral in improving your department's efficiency.

The innovative functional design of the CRC[®]-55tR allows for a large, easy-to-read display that indicates Nuclide Name, Number, Activity, Unit of Measure and Calibration Number.



Entering data through the custom touch screen interface is fast and includes 28 programmable keys. The user can select from 80 nuclides by simply selecting the nuclide symbol on the touch screen interface.

Other capabilities include storage of reference sources in memory that automatically decay correct for today's time and date. Automated quality control tests and self-diagnostics are built-in with automatic zero and background subtraction making the CRC[®]-55tR exceptionally easy to use. An optional printer enables the CRC[®]-55tR to print full size records and patient tickets with peel off labels for vial and syringe identification.

- 8" colour VGA touch screen display.
- Chamber plug-and-play capability.
- Chamber and remote can be placed 100 feet from the readout unit.
- Selection of Nuclide and Daily Test can be done with the remote.
- On screen display of Nuclide Name, Number, Activity, Unit of Measure and Calibration Number.
- Large character, high visibility display.
- Over 80 Nuclides with half-lives in memory.

- Full alpha numeric touchpad.
- Built-in dose calibration, quality control and self diagnostics.
- Automated QC including constancy and linearity programs.
- Compatible with Nuclear Medicine Management Systems.
- Optional printer for full size NRC records and patient labels for syringes and vials.
- Optional intelligent programmable remote display indicating Nuclide, Activity and Unit of Measure, and perform daily test.
- Optional second chamber.
- USB/PC Communications.
- Software upgrade via ethernet interface.
- USB printer capability.

Specifications

Chamber Dimensions

Height	43.8 cm (17.25")
Diameter	17.2 cm (6.76")
Weight	13.6 kg (30 lb)
Well Diameter	6.1 cm (2.4")
Well Depth	25.4 cm (10")
Cable Length 1	3.7 m (12 ft)

Console Dimensions

Height	42 cm (9.5")
Width	23 cm (9")
Depth	27 cm (10.5")
Weight	3.4 kg (7.5 lb)

Cables

Power 1	1.8 m (6 ft)
Printer	1.8 m (6 ft)

Ionisation Chamber

Type	Thin wall, deep well, high pressure
Fill Gas	12 atm Ultra Pure Argon

Measurement Range

Type	Auto Ranging
Activity	20 GBq (6 Ci) max.
Resolution	.001 MBq (.01 μ Ci) max.

Display Screen

Type	8" VGA LCD colour touch screen display
Format	Direct reading in Bq or Ci
Bq/Ci Reading	User selectable or fixed
Values Displayed	Nuclide name (Atomic symbol, Mass number), calibration number

Repeatability of Measurement

Response Time	Within \pm 1% within 24 hours, during which time the calibrator is on all the time
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Electrometer

Accuracy	Better than \pm 2%
Linearity	Within \pm 2%
Response Time	Within 2 sec., 4 to 16 sec. for very low activity samples (user selectable average period)

Tests

Diagnostics	Full test of program, system memories
Daily	Auto Zero, Auto Background Adjust, Data Check, Accuracy and Constancy, Voltage Test
Enhanced	Linearity, Geometry, Strip QC

Nuclear Data

Nuclide Keys	28 programmable keys
System Memory	Over 80 nuclides (cal number and half-life)

System Source Data

System Memory	⁵⁷ Co, ⁶⁰ Co, ¹³³ Ba, ¹³⁷ Cs Standard Sources
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Molybdenum-99 Assay

Methods	Canisters of CAPMAC
Measured Values	^{99m} Mo elution, ^{99m} Tc, ^{99m} Tc/ ⁹⁹ Mo Ratio

PC Port

Interface	RS-232 and USB
Compatibility	Standard Nuclear Medicine Management Systems
	Ethernet interface

Printer (Optional)

Interface	RS-232 and USB
Type	Epson Roll, Epson Slip or Okidata full size dot matrix
Printing Options	Full size test reports. Measured results on tickets

Power Requirements

100-240 VAC (50/60Hz) 90 MA

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A LabLogic Group Company



Version 1.0 April 2024