

# CRC<sup>®</sup>-25 PET Dose Calibrator

## The New Standard For Speed and Accuracy in Measuring PET Isotopes

The new Capintec CRC<sup>®</sup>-25PET Dose Calibrator meets the demands of your Nuclear Medicine/PET Department with a host of new features for optimized usage; including USB capabilities, SD flash cards for software upgrades, chamber plug-and-play, enhanced remote functionality, and more.

All nuclide data is entered via the custom keyboard that includes 9 user-definable keys. Four reference sources are stored in memory, that are automatically decay-corrected for today's time and date. Its space efficient design allows for a large, easy to read display.

Dose calibration quality control tests and self-diagnostics are built in; along with automatic zero and background subtraction, making the CRC<sup>®</sup>-25PET extremely easy to use. Optional printers enable the CRC<sup>®</sup>-25PET to print full size records and patient tickets with peel off labels for vial and syringe identification.

Reduced chamber pressure and increased bias voltage increases the maximum activity range for high energy PET isotopes. A sophisticated microprocessor chip platform expands control features and improves the speed of activity measurements.

Innovative designs, proven performance and the most comprehensive technical service and support system available is what you'd expect from the leader in dose calibrator design and development. For the latest technology and expert service, Count on Capintec for the proven performance of our dose calibrators and commitment to customer support!



**CRC-25 PET Dose Calibrator:** Item #5130-3217

**CRC-25 PET: Multiple Chamber Option:** Item #5130-2218

- USB/PC Communications
- SD flash card software upgrade
- USB printer capability
- Chamber plug-and-play capability
- Remote that communicates over a high-speed serial interface, and plugs into the chamber
- Both remote and chamber 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, Activity, Unit of Measure and Calibration Number
- Large character, high visibility display with automatic backlighting
- Automatic zero and background subtraction
- Built-in dose calibration, quality control and self diagnostics
- Has a maximum activity up to 20 Ci of F-18
- Compatible with Nuclear Medicine Management Systems
- Optional printer for regulatory records and patient labels for syringes and vials
- Optional remote display indicating Nuclide, Activity, and Unit of Measure
- Over 80 nuclide symbols and half-lives in memory

### Console Dimensions

- Height: 13.7cm (5.38in)
- Width: 26.0cm (10.25in)
- Depth: 26.7cm (10.5in)
- Weight: 1.8kg (3.9lb)

### Chamber Dimensions

- Height: 43.8cm (17.25in)
- Diameter: 17.2cm(6.76in)
- Weight: 13.6kg (30lb)
- Well Diameter: 6.1cm (2.4in)
- Well Depth: 25.4cm (10.0in)
- Cable Length<sup>1</sup>: 3.7m (12ft)

### Cables

- Power<sup>2</sup>: 1.8m (6ft)
- Printer: 1.8m (6ft)

<sup>1</sup>: Longer cables are available. Consult factory.

<sup>2</sup>: Optional.

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## Ionization Chamber

- Type: Thin wall, deep well
- Dimensions: 43.8 cm (17.25") high x 17.2 cm (6.76") dia.
- Cabling: 3.7 m (12') interconnecting cable
- Fill Gas: 5 atmospheres Argon
- Well Dia: 6 cm (2.4")
- Well Depth: 26 cm (10")

## Measurement Range

- Type: Auto Ranging
- Activity: 20 Curies of F-18
- Resolution: 0.1 Ci (0.01 MBq), max.

## Display Screen

- Type: Dot Matrix Liquid Crystal Display
- Format: Direct reading in Ci or Bq
- Bq/Ci Reading: User selectable or fixed
- Values Displayed: Nuclide name (Atomic symbol, Mass number), calibration number

## 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)
- Bias Voltage: 500V

## Repeatability of Measurement

- Repeatability: Within  $\pm 1\%$  within 24 hours during which time the calibrator is continuously on all the time

## Overall Accuracy

- Accuracy Determined By:
  - 1) Calibration for the specific nuclide and the sample configuration,
  - 2) Accuracies of standard sources used for calibration of electrometer

## Tests

- Diagnostics: Full test of program, system memories
- Daily: Auto Zero, Auto Background, Voltage Test, Data Check, Accuracy and Constancy

## Nuclear Data

- Nuclide Setting Keys: 9 programmable user keys, 4 pre-set

## Standard Source Data

- System Memory: Co-57, Co-60, Ba-133, Cs-137, Na-22 Standard Sources

## PC Port

- Interface: Rs-232 Protocol & USB
- Compatibility: Standard Nuclear Medicine Management Systems

## Printer (Optional)

- 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 (50/60 Hz) 100mA

## Optional Components



**CRC-PS Positron Shield:**  
Item #7300-2903



**CRC-AD25 Auxiliary Display:** Item #5130-2224



**Epson Roll Printer:**  
Item #5430-0058



**Epson Ticket Printer:**  
Item #5430-0100



**CRP-200 Dose Tickets & Labels:**  
Item #7120-1199