

# CRC<sup>®</sup>-25R Dose Calibrator

## The Measure for Dose Calibrators

The Capintec CRC<sup>®</sup>-25R Dose Calibrator gives you the state-of-the-art technology you've always expected from Capintec, plus many outstanding new features in one small package. The CRC<sup>®</sup>-25R is designed to meet the demands of your Nuclear Medicine Department with accuracy and ease of operation. With added features including USB/PC Communications and printer capability, SD flash card software upgrade, a chamber plug-and-play feature and expanded remote capabilities, the CRC<sup>®</sup>-25R will prove to be a long term asset in your workplace.

The space efficient design of the CRC<sup>®</sup>-25R allows for a large, easy-to-read display that indicates Nuclide Name, Number, Activity, Unit of Measure and Calibration Number.

All nuclide data is entered via the custom keyboard that includes 8 preset and five user-definable keys. In addition, the user can enter in over 80 nuclides by using the Nuclide symbol such as Co for cobalt and 60 for Co 60. Calibration numbers for over 200 radionuclides are easily accessed by use of the Cal key.

Other capabilities include storage of five reference sources in memory that are automatically decay corrected for today's time and date. Dose calibration quality control tests and self-diagnostics are built-in along with automatic zero and background subtraction making the CRC<sup>®</sup>-25R extremely easy to use. An optional printer enables the CRC<sup>®</sup>-25R to print full size records and patient tickets with peel off labels for vial and syringe identification.

Innovative designs, proven performance and the most comprehensive technical system available is what you would expect from the leader in dose calibrator design and development! For premium service, Count on Capintec for our long-standing commitment to customer satisfaction and support.



- Radiochromatography QC package
- Built-in geometry testing



## 25R Specifications

- Ionization Chamber: Type: Thin wall, deep well, high pressure; Dimensions: 26 cm (10") deep x 6 cm (2.4") dia.; Cabling: 3.7m (12') interconnecting cable
- Measurement Range: Type: Auto Ranging; Activity: 250 GBq (6 Ci), max; Resolution: .001 MBq (.01  $\mu$ Ci), max.
- Display Screen: Type: Dot Matrix Liquid Crystal 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
- 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)
- Repeatability of Measurement: Repeatability: Within  $\pm$  1% within 24 hours, during which time the calibrator is on all the time.
- Tests: Diagnostics: Full test of program, system memories; Quarterly: Daily, Accuracy and Linearity; Daily: Auto Zero, Auto Background Adjust, Data Check, Accuracy and Constancy
- Nuclear Data: Nuclear Setting Keys: 8 Pre-set, 5 User; Calibration Key: Over 200 nuclides; System Memory: Over 80 nuclides (w/cal number and half-life); A pre-set key measures up to 2.0 Ci (74.0 GBq) of F-18
- Standard Source Data: System Memory: Co-57, Co-60, Ba-133, Cs-137 Standard Sources
- Molybdenum-99 Assay: Methods: Canisters of CAPMAC; Measured Values: Mo-99 elution, Tc-99m, Tc-99m/Mo-99 Ratio
- PC Port: Interface: Rs-232C 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 (50/60Hz) 90 MA;
- Display Unit Dimensions: 4.75" H x 10.0" W x 10.5" D (12.1 x 25.4 x 26.7cm); Weight: 4 lb (2 kg)

**CRC<sup>®</sup>-25R Calibrator** ..... 5130-3215

## Optional Accessories

<b>CRC<sup>®</sup>-Interactive Remote Display</b> .....	5130-2224
<b>Epson Roll Printer</b> .....	5430-0058
<b>Epson Ticket Printer</b> .....	5430-0100
<b>CRC<sup>®</sup>-200 Dose Tickets &amp; Labels</b> .....	7120-1199
<b>CAP-MAC<sup>®</sup>-S Molly Assay Canister for Syringes</b> .....	5130-2046
<b>Molly Assay Canister</b> .....	5130-0006
<b>Chamber Well Insert</b> .....	7300-2004
<b>Environmental Shield</b> .....	7300-2450
<b>Dipper</b> .....	7300-2005

## 25R Features

- USB and RS232 Port
- SD flash card software upgrade
- USB printer capability
- Chamber plug-and-play capability
- Interactive intelligent remote display
- 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 Name, Number, Activity, Unit of Measure and Calibration Number
- Large character, high visibility display with automatic backlighting
- Over 80 Nuclides with half-lives in memory
- Automatic zero and background subtraction
- Built-in dose calibration, quality control and self diagnostics
- Includes a pre-set key for F-18 measurements
- Compatible with Nuclear Medicine Management Systems via USB
- Optional printer for full size NRC records and patient labels for syringes and vials.
- Inventory Control
- Dose table calculations
- Enhanced software includes linearity and geometry protocol

# CRC<sup>®</sup> -25R Software

## Increased Functionality for Your Dose Calibrator...

Enjoy the added functionality of enhanced software on the CRC<sup>®</sup>-25R, with all of the same great features of the CRC<sup>®</sup>-15R plus a few new ones.

- Inventory control
- Dose table calculations
- Newly added linearity protocol
- Radiochromatography QC package
- Built in geometry testing

The CRC<sup>®</sup>-25R ENHANCED SOFTWARE will still perform the Daily QC protocol, zero adjust, background subtraction, system test, accuracy (with a deviation percentage) and constancy. In addition, the software will calculate dose tables, perform geometry tests (for between 2 and 10 measurements), do radiochromatography, calculate linearity (using standard, Lineator or Calicheck methods) and maintain a radiopharmaceutical inventory of kits or unit doses. All of the acquired data are printable.

### 25R Enhanced Features

- Capintec quality and reliability
- Calculation of a printable dose table
- Inventory control - maintains inventory of unit doses and kits
- Linearity test - calculates a report for standard, lineator and calicheck methods
- Geometry test showing variations for 2 to 10 different measurements
- Radiochromatography of kit QC strips - one strip, two strip, HMPAO and MAG3

STANDARD LINEARITY		
#	MEASURED	%VAR
1	50.4mCi	2.10
2	36.5mCi	1.85

Any Key to Continue

Standard Linearity Test Results Screen

INVENTORY	
1.	ADD
2.	KIT
3.	WITHDRAW
4.	PRINT
5.	DELETE

Single Strip Result Screen

QC TEST	
Single Strip	
Top	/ (Top + Bottom)
	%
Bottom	/ (Top + Bottom)
	%

Any Key to Continue

Inventory Menu

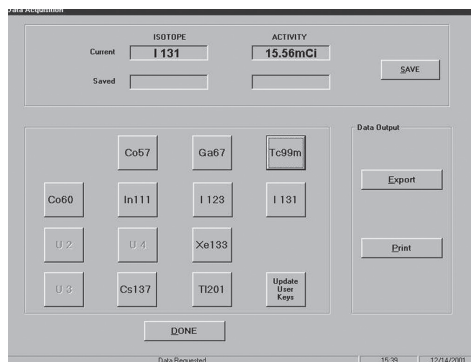
# CRC<sup>®</sup> -25R PC Series Communications Software

## Fast and Easy Data Acquisition- Track, Record and Store Dose Calibrator Measurements on Your PC

CRC<sup>®</sup> PC Communications software will allow for faster and easier data acquisition and storage to your computer. Measurement data, including isotope name and activity, will be transmitted and stored on your PC via an RS232 interface port and the Dose-Link Software package. Ideal for maintaining regulatory compliance, research studies or use in production facilities.

The PC Communications software will create an interface between your CRC<sup>®</sup>-25R dose calibrator and your PC. The Dose Link program has four modes of operation:

- Acquire and Store Data - Each second the name and activity of the isotope selected on the dose calibrator console will be updated by the program. This data can be saved and exported to an Excel spreadsheet.
- Repetitive Acquisitions - Following user defined parameters of time intervals and number of measurements, activity and isotope data are acquired and saved. The data can then be printed or exported. Great for performing quarterly linearity tests (you don't even have to be there).
- Maximum Activity Acquisition - The activity and isotope are updated and displayed at time intervals defined by the user, when



Data Acquisition Screen

data acquisition is stopped, the maximum activity and time will be saved and can be printed or exported.

The CRC<sup>®</sup> PC Communications software is easy to install, easy to use and almost as cost conscious as you are. Help your department maintain accurate record keeping without breaking the department budget.