

# CRC®-55tW Dose Calibrator

**Introducing the NEW standard in providing your nuclear medicine department with the capability to perform dose calibration, wipe tests and lab tests all in one unit!**

As a combination of the new CRC®-55tR Dose Calibrator and Well Counter, the CRC®-55tW's dose calibrator provides advanced features with the speed and accuracy you need to measure activity and prepare doses. Its 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. The CRC®-55tW features a new helpful chamber plug-and-play capability.

For wipe testing, the CRC®-55tW allows the user to define specific counting procedures (protocols) with trigger levels for work, patient, unrestricted areas and sealed source leak tests. The CRC®-55tW also performs counting functions for wipe tests in as little as 6 seconds at activities as low as 1 nCi. Low activities are measured with a drilled well high sensitivity Sodium Iodide (NaI) detector.

The well counter includes a 256 channel MCA which provides detailed spectrum for identification and analysis. Manual and automatic ROI selection are available.

The chamber and counter of the CRC®-55tW are combined in a menu driven, touch screen interface that is easy to learn and use.

Reports software, new for the CRC-55t-W, archives well counter data for quality assurance procedures, wipe measurements and laboratory tests. Well counter reports are stored and searchable by date range for later viewing or printing. Wipe tests are searchable by date range, wipe type, and activity.

Count on Capintec for excellence in energy measurement and for our unsurpassed customer service, training and support!

**CRC®-55tW Dose Calibrator:** Item #5130-2216



- 8" VGA touch screen color display
- USB/PC Communications
- Software upgrade via USB or Flash Drive
- USB printer capability
- Chamber plug-and-play capability
- Optional intelligent remote displays nuclide, activity, and performs daily tests
- 28 programmable nuclide keys
- Built-in dose calibration, quality control and self diagnostics
- Over 80 nuclides in memory
- Automatic chamber QC including linearity
- Hard copy records of data available from optional printer
- Compatible with nuclear medicine information management systems via network interface
- 256 channel MCA with detailed spectrum for identification analysis
- Well counter for wipe tests and laboratory tests
- Lab tests include Schillings, Plasma and RBC volume
- User-definable protocols for wipe testing
- Automated well QC including Chi-Square and MDA
- Manual and Automatic ROI
- Includes a pre-set key for F-18 measurements
- Reports: Well counter reports for autocalibration, system test, MDA, Chi-Square and laboratory tests are archived and searchable by date, type, and activity
- Automated Linearity Testing and Geometry Testing

## Console Dimensions

- Height: 42cm (9.5in)
- Width: 23cm (9.0in)
- Length: 27cm (10.5in)
- Weight: 3.4kg (7.5lb)

## 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)

## Well Counter Dimensions

- Height: 23.8cm (9.38in.)
- Diameter: 15.2cm (6in.)
- Weight: 6.9kg (15.2lb.)
- Well Diameter: 1.7cm (.67in.)
- Well Depth: 3.8cm (1.5in.)
- Cable Length: 2.7m (9ft.)

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



# CRC<sup>®</sup>-55tW Dose Calibrator

## Well Detector

- Type: Sodium Iodide (NaI) drilled-well crystal detector
- 256 Channel MCA, manual and automatic ROI
- Warning Trigger Levels: User-definable
- Tests: Daily test, energy calibration, and reproducibility
- Enhanced QC includes Chi-Square and MDA

## Ionization Chamber

- Fill Gas: 12 atm Ultra Pure Argon
- Measurement: Auto ranging
- Activity Range: Up to 6 Ci (250 GBq)
- Resolution: .001 MBq (.01  $\mu$ Ci)
- Response Time: Within 2 sec., for low activity sample, 4 to 16 sec. (user selectable)
- Tests: Daily tests include Auto Zero, Background Adjustment, Voltage Test, Data Check, Accuracy and Constancy
- Enhanced QC includes linearity, geometry, strip QC

## Display Screen

- Type: 8" VGA LCD color touch screen display
- Bq/Ci Reading: User selectable or fixed
- Activity Display: Selected radionuclide, calibration number, measured activity and display units (Bq/Ci)
- Count Rate Values: Wipe and lab test results

## Electrometer

- Accuracy: Better than  $\pm 2\%$
- Linearity: Within  $\pm 2\%$

## Repeatability of Measurement

- Within  $\pm 1\%$  within 24 hours, during which time calibration is powered at all times

## Nuclide Data

- Nuclide Setting Keys: 28 programmable keys
- System Memory: Over 80 nuclides (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

## Molybdenum-99 Assay

- Methods: CAPMAC<sup>®</sup> & canisters
- Measured Values: Mo-99 elution, Tc-99m, Tc-99m/Mo-99 ratio

## PC Port

- Interface: RS-232 and USB
- Compatibility: Standard nuclear medicine management systems
- Ethernet interface

## Printer

- RS-232 & USB Ports
- Epson Roll, Epson Slip or Okidata dot matrix

## Power Requirements

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

## Tests

- Diagnostics: Full test of program, system memories

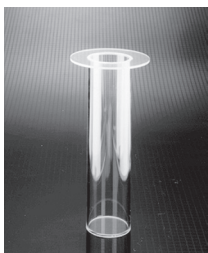
## Cable

- Printer (Optional): 1.8m (6ft)
- Power: 1.8m (6 ft)

## Optional Components



**Auxiliary Shield:**  
Item #5420-2072



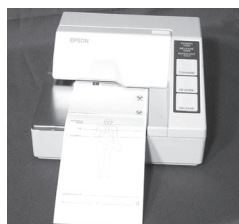
**Liner:**  
Item #7300-2004



**CRC<sup>®</sup> Remote Display:**  
Item #5130-2224



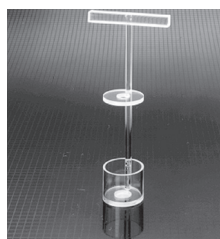
**Epson Roll Printer:**  
Item #5430-0058



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



**Environmental Shield:**  
Item #7300-2450



**Dipper:**  
Item #7300-2005



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

