

# CRC®-55tW

## Dose Calibrator & Well Counter

For Speed and Accuracy  
in Measuring Isotopes



### Features

- 8 in. VGA touch screen color display
- USB/PC Communications
- Software upgrade via USB or flash drive
- USB printer capability
- Chamber plug-and-play capability
- 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 USB
- 256 channel MCA with detailed spectrum for identification analysis
- Well counter for wipe tests
- 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, and Chi-Square are archived and searchable by date, type, and activity
- Automated linearity and geometry testing

### Description

As a combination of the CRC®-55tR Dose Calibrator and Well Counter, the CRC-55tW Dose Calibrators provide advanced features with the speed and accuracy you need to measure activity and prepare doses. Its ion chamber is one of the time-tested, high pressure well designs by Capintec™ capable of measuring a dose as high as 6 Ci Tc99m (250 GBq) with high accuracy. The CRC-55tW calibrator features a new helpful chamber plug-and-play capability.

For wipe testing, the CRC-55tW calibrator 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 unit also performs counting functions for wipe tests in as little as six 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 calibrator are combined in a menu-driven, touch screen interface that is easy to learn and use.

Reports software, new for the CRC-55t-W unit, archives well counter data for quality assurance procedures, and wipe measurements. 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 us for excellence in energy measurement and for our unsurpassed customer service, training and support!

Optional Componets



Specifications

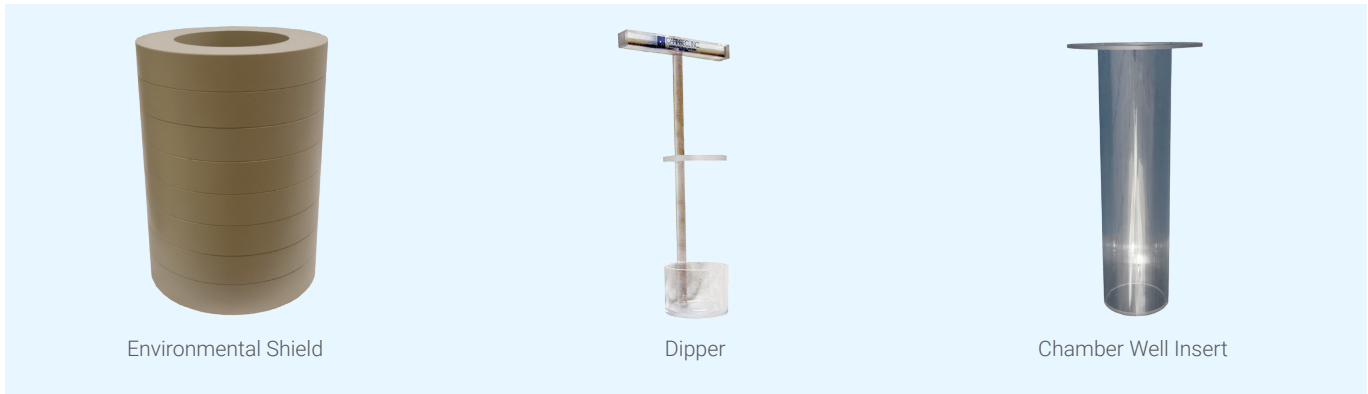
Physical:

- **Console Dimensions:**  
**Height:** 24 cm (9.5 in.)  
**Width:** 23 cm (9.0 in.)  
**Length:** 27 cm (10.5 in.)  
**Weight:** 3.4 kg (7.5 lb)
- **Chamber Dimensions:**  
**Height:** 43.8 cm (17.25 in.)  
**Diameter:** 17.2 cm (6.76 in.)  
**Weight:** 13.6 kg (30 lb)  
**Well Diameter:** 6.1 cm (2.4 in.)  
**Well Depth:** 25.4 cm (10.0 in.)  
**Cable Length<sup>1</sup>:** 3.7 m (12 ft)
- **Well Counter Dimensions:**  
**Height:** 23.8 cm (9.38 in.)  
**Diameter:** 15.2 cm (6 in.)  
**Weight:** 6.9 kg (15.2 lb)  
**Well Diameter:** 1.7 cm (.67 in.)  
**Well Depth:** 3.8 cm (1.5 in.)  
**Cable Length:** 2.7 m (9 ft)
- **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

1: Longer cables are available. Consult factory.

- **Ionization Chamber:**  
**Fill Gas:** 12 atm Ultra-Pure Argon  
**Measurement:** Auto ranging  
**Activity Range:**  
 6 Ci (222 GBq) Tc99m max  
 2 Ci (74 GBq) F18 max  
**Resolution:** .01 µCi (.001 MBq), max.  
**Response Time:** Within 2 seconds, for low activity sample, 4 to 16 seconds  
**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 in. 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 results
- **Electrometer:**  
**Accuracy:** Better than ± 2%  
**Linearity:** Within ± 2%
- **Repeatability of Measurement:**  
 Within ± 1% within 24 hours during which time the calibrator is powered at all times
- **Nuclear 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

## Optional Componets



- **Standard Source Data:**  
**System Memory:** Co-57, Co-60, Ba-133, Cs-137
- **Molybdenum-99 Assay:**  
**Methods:** CapMac and 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
- **Printer:**  
**Interface:** RS-232 and USB  
**Type:** Epson Roll, Epson Slip or Okidata dot matrix
- **Power Requirements:**  
100-240 V ac (50/60 Hz) 100 MA
- **Tests:**  
**Diagnostics:** Full test of program, system memories
- **Cable:**  
**Printer:** (Optional): 1.8 m (6 ft)  
**Power:** 1.8 m (6 ft)

## Ordering Information

5130-2216	CRC-55tW Dose Calibrator
5420-2072	Auxiliary Shield
7300-2004	Chamber Well Insert
5430-0058	Epson Roll Printer
7120-1199	CRP-200 Dose Tickets & Labels
5430-0100	Epson Ticket Printer
7300-2450	Environmental Shield
7300-2005	Dipper