



DOSE CALIBRATORS

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 Testing and Geometry Testing

DESCRIPTION

As a combination of the new 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 (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.

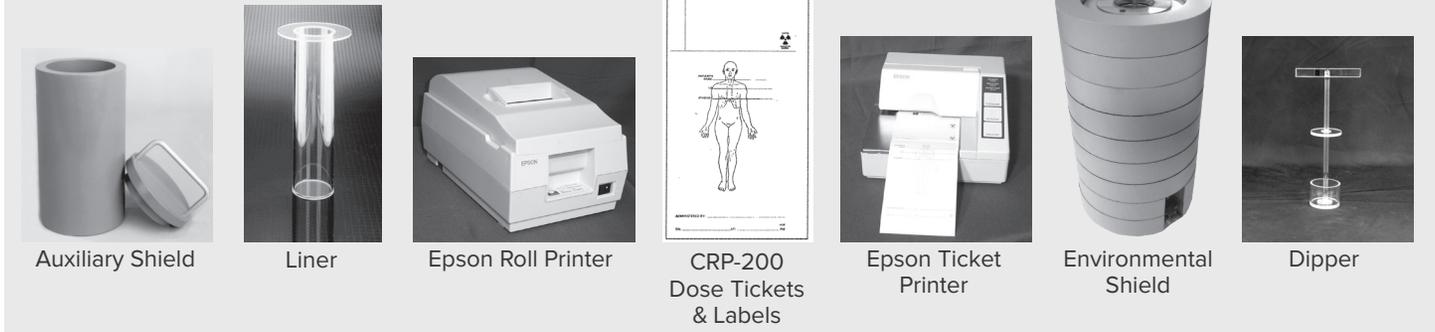
The well counter includes a 256 channel MCA which provides detailed spectrum for identification and analysis. Manual and automatic ROI selection are available.

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 COMPONENTS



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 Length¹: 3.7 m (12 ft)

1: Longer cables are available. Consult factory.

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

Ionization Chamber

- Fill Gas: 12 atm Ultra-Pure Argon
- Measurement: Auto ranging
- Activity Range: Up to 6 Ci (250 GBq)
- Resolution: .001 MBq (.01 µCi)
- Response Time: Within 2 sec, for low activity sample, 4 to 16 sec
- 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

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 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

- RS-232 and USB Ports
- 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

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

