

# CRC<sup>®</sup>-77tHR

## Dose Calibrator

High Activity Measurements for  
Isotope Production Environments



### Features

- Maximum activity for 77tHR is 400 Curies (15 TBq)
- Radiation resistant design
- Custom length liners and dippers available to match your hot cell dimensional requirements
- 8 in. color VGA touch screen display
- On-screen display of Nuclide Name, Number, Activity, Unit of Measure and Calibration Number
- Large character, high visibility display
- Over 80 nuclides with half-lives in memory
- Full alphanumeric touchpad
- Built-in dose calibration, quality control and self-diagnostics
- Automated QC including constancy and linearity programs
- Compatible with Nuclear Medicine Management Systems via USB
- Optional printer for full size hard copy records
- USB/PC communications
- Software upgrade via USB or flash drive
- USB printer capability
- Automated geometry and linearity testing

### Description

The CRC-77tHR calibrator's performance and reliability have been designed to meet the unique and demanding needs of the isotope manufacturing and radiopharmaceutical production environments.

The software is designed for rapid repeatable measurement functions often required in production, and includes a fully automated Quality Assurance Program. Hardware is carefully designed to minimize the impact of high radiation fields upon electronics. A touch screen user interface provides a user-friendly and efficient workflow.

Some features include a high activity range of over 400 Curies for Tc-99m, USB/PC communications, and pre-defined communication protocols for fast and easy system interface.

We offer a full line of related Capintec™ products to safely use the CRC-77tHR calibrator within your hot cell or hood environment.

Related Products



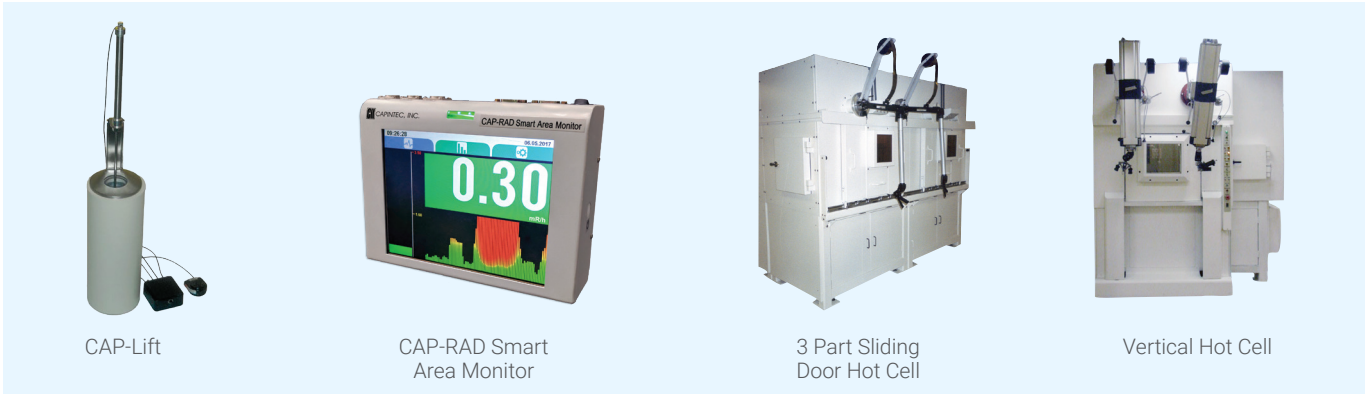
Specifications

Physical:

- **Console Dimensions:**  
**Height:** 42 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:** 25.3 cm (10.0 in.)
- **Cables:**  
**Power:** 1.8 m (6 ft)  
**Cable Length:** 3.7 m (12 ft)
- **Ionization Chamber:**  
**Type:** Thin wall, deep well  
**Fill Gas:** 1 atm Ultra-Pure Argon
- **Measurement Range:**  
**Type:** Auto Ranging  
**Activity:** 15 TBq (400 Ci), max Tc-99m, 4.8 TBq (130 Ci), max F-18  
**Resolution:** 0.01 MBq (10  $\mu$ Ci), max.  
**Energy:** 15 keV to 3 MeV  
Not recommended for activity measurements < 100  $\mu$ Ci

- **Display Screen:**  
**Type:** 8 in. VGA LCD color touch screen 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 3 to 4 seconds, 5 to 25 seconds for low activity samples
- **Repeatability of Measurement:**  
Within  $\pm 1\%$  within 24 hours during which time the calibrator is continuously in operation
- **Tests:**  
**Diagnostics:** Full test of program, system memories  
**Daily:** Auto Zero, Auto Background Adjust, Data Check, Accuracy and Constancy, Voltage Test  
**Enhanced:** Linearity, Geometry

## Related Products



CAP-Lift

CAP-RAD Smart Area Monitor

3 Part Sliding Door Hot Cell

Vertical Hot Cell

- **Nuclear Data:**  
**Nuclide Keys:** 28 programmable keys
- **Standard Source Data:**  
**System Memory:** Co-57, Co-60, Ba-133, Cs-137 standard sources
- **PC Port:**  
**Interface:** USB  
**Compatibility:** Standard Nuclear Medicine Management Systems
- **Printer (Optional):**  
**Interface:** USB  
**Type:** HP Inkjet  
**Printing Options:** Full size test reports  
**Power Requirements:**  
100-240 V ac (50/60 Hz) 100 MA

## Ordering Information

- 5130-30261 CRC-77tHR Dose Calibrator
- 7300-2903 Positron Shield
- 5120-2258 Custom Length Dipper
- 5120-2257 Custom Length Liner
- 5126-2001 Positron Shield Stand
- 5130-30251 CAP-Lift
- 078-450 CAP-RAD Smart Area Monitor
- 3 Part Sliding Door Hot Cell: Call for information
- Vertical Hot Cell: Call for information



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