

CRC[®] -15BT Dose Calibrator

Perfect for HDR or LDR Brachytherapy Source Calibration...

Accurate high activity brachytherapy measurements present new challenges in Radiation Therapy, the CRC-15BT easily overcomes these challenges. Both HDR and LDR brachytherapy sources are quickly and precisely measured by the CRC-15BT.

The console of the CRC-15BT is designed for ease and efficiency. There are 14 programmable nuclide keys, and a large LCD display that will show the isotope name, activity (in Ci or U) and calibration number. A custom alphanumeric keyboard drives all of the menus and functions.

The chamber of the CRC-15BT has 1/8" (3.2mm) mechanically reinforced lead shielding. The chamber is a sealed thin wall, deep well design with 2.5 atmospheres of Argon gas and a 500V bias in order to achieve optimal response time (within 2 seconds) without temperature or pressure corrections.

ADCL Calibration is available with the CRC-15BT to ensure maximum accuracy. Calibrated with the specific brachytherapy source(s) utilized in your department, activity can be measured precisely in either Curies (Ci) or Air Kerma strength (U).

The CRC-15BT software is a menu driven design that will allow the user to move rapidly through all of the system functions. The Daily QC protocol will perform zero adjust, background subtraction, system test, accuracy (with a deviation percentage) and constancy. The nuclide library is programmed with more than 80 nuclides and half-lives, plus available space for 10 additional nuclides. The system memory can also support up to 20 brachytherapy sources with isotope name, calibration number, Air Kerma strength and ADCL factor.


Overall the CRC-15BT is quick, reliable and cost effective. With optional features such as the RS-232 computer interface port, a selection of printers (ticket, roll or full page) or the CRC-AD15 auxiliary display you can configure a system that is right for your department.

For those customers who require a more portable measurement solution, the BT is also available as a stand alone chamber, which can be connected directly to your department's electromer. Available with either TNC or BNC connector.

15BT Features

- Sealed gas filled ionization chamber (no temperature/pressure corrections required)
- Auto ranging
- Max activity up to 12 Ci
- Remote ionization chamber with 8-foot cable (longer lengths available)
- Microprocessor controlled
- Large LCD display with nuclide name, activity (Ci or Bq) and calibration number
- Daily QC functions, including zero adjust, background subtraction, system test, accuracy (with deviation percentage) and constancy



- Library of over 80 nuclides and half-life with room for 10 additional nuclides
- Menu driven programming for easy navigation
- An unsurpassed technical support and service team
- 

15BT Specifications

- Ionization Chamber: Thin wall, deep well, Argon gas [16.3cm (6.4") deep x 6.1cm (2.4") dia. opening]
- Chamber Shielding: 1/8" (3.2mm) mechanically reinforced lead
- Measurement Range: Autoranging, up to 12 Ci
- Resolution: 0.001 MBq (0.01 µCi)
- Electrometer Accuracy: Better than ±2%
- Linearity: Within ±2%
- Response Time: Within 2 sec., for very low activity 4 or 16 sec. (user selectable)
- Nuclide Keys: 14 user defined
- Calibration Key: Over 200 Nuclides
- Printer Interface: Provided for serial printer
- System Memory: Over 80 Nuclides (w/ half-life),
- Ability to add 10 nuclides and 20 brachytherapy sources (w/cal #, U and ADCL factor)
- Power Requirements: 100-240 VAC 0.1A or 50/60 Hz 120mA
- Display Unit Dims: 4.75" x 10.0" x 10.5" (12.1 x 25.4 x 26.7 cm); Weight: 2kg (4lb)
- Chamber External Dims: 12.3" x 6.7" (31.3 x 17.0cm) Weight: 26.8 lb. (12.2 kg)
- Interconnecting Cable: 8' (2.4m) (Longer lengths available)
- Metal cable connectors with thumb screws
- No battery required

CRC [®] -15BT Dose Calibrator	5130-3127
CRC [®] -15BT Stand Alone Chamber	5130-2135

Optional Accessories

CRC [®] Auxiliary Display	5130-2082
RS-232-R Serial Port	5130-0080
Okidata Printer.....	5130-0074
Epson Roll Printer.....	5430-0058
Epson Ticket Printer	5430-0100
Ir-192 Brachytherapy Ribbon Holder (15BT)	0976-0007
Cs137 Brachytherapy Seed Holder.....	0976-0004
I-125 Brachytherapy Seed Holder	0976-0003
Liner (15BT).....	5120-2236
Dipper (15BT).....	5120-2237