

CDX2000B ELECTROMETER



VERSATILE, AFFORDABLE

The compact, stable, lightweight and easily transported CDX 2000B has wide amp and coulomb ranges for both external beam dosimetry measurements and precise HDR brachytherapy calibrations

- **NEW! EXTENDED RANGE FOR MANY APPLICATIONS**

The wide range of the CDX 2000B (0.01 nA - 500.00 nA) makes it an excellent instrument for external beam, absolute dosimetry measurements with standard Farmer-type and parallel plate ion chambers. It is also reliable and precise for high dose rate brachytherapy applications.

- **LOW NOISE AND STABLE REPEATABILITY**

A powerful digital microprocessor provides 0.1% repeatability and exceptionally low leakage of less than 5 fA. The built-in digital filter nearly eliminates the effects of noise, resulting in stable and exact measurements.

- **EASY TO USE WITH CONVENIENT FEATURES**

Control operations with a fast, push button interface. With user activated zeroing, just press a button and it is ready to measure. The CDX 2000B operates off a rechargeable battery for up to 8 hours of continuous use.

- **NEW! ENHANCED BIAS SELECTION**

The CDX 2000B allows a wide assortment of bias settings for performing both TG-51 and now TRS-398 measurements with support for 1/3 bias ratio settings. Apply (+/-) 450, 300, or 150 VDC to your chamber of choice with no external bias supply required.



Features and Benefits

Unique Timing Capabilities

- The unique timing feature is ideally suited for HDR brachytherapy calibration measurements. The CDX 2000B can capture charge for a selected amount of time during an exposure, thereby eliminating end effects or other variable portions of an exposure.

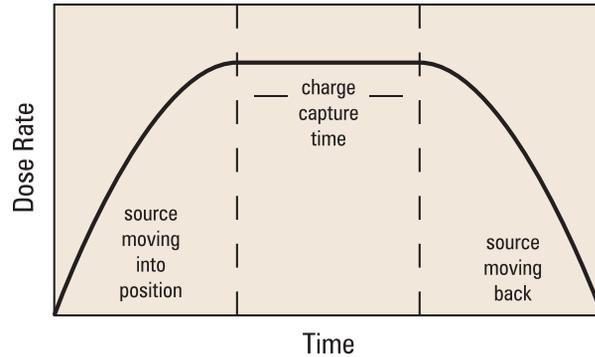
This timed collection application is useful during the measurement of high dose rate brachytherapy sources, allowing the measurement of charge only during the time the source is in place and the rate is constant.

Simple, Intuitive Interface

- Large, easy to read LCD display is visible from a distance and in low light
- Simultaneous display of amp, coulomb, and collection time minimizes the need to switch screens
- User activated, automatic zeroing function

Measure with Confidence

- Designed to exceed AAPM, ADCL and reference grade instrument specifications
- Designed to meet or exceed requirements of IEC 60731 for reference grade instruments



CDX 2000B (REF 90001) SPECIFICATIONS

DISPLAY RANGE

RATE: 0.01 nA – 500.00 nA
CHARGE: 0.01 nC – 999,999 nC

DISPLAY MODES Rate, Charge, Rate & Charge

CHARGE COLLECTIONS

TIMED: User set duration (*Range: 0 – 600 seconds; Increment: 15 seconds; Resolution: 1 second*)
CONTINUOUS: Unlimited duration with manual stop

REPEATABILITY ± 0.1%
(IEC 60731 requirement: ± 0.5%)

LONG-TERM STABILITY ± 0.5% (over one year)

STABILIZATION TIME ± 0.1%
(IEC 60731 requirement: ± 0.5% of value at 1 hr for measurements taken at 15 min and 6 hrs)

RESPONSE TIME < 3 s (IEC 60731 requirement: < 3 s)

NON-LINEARITY ± 0.25% (IEC 60731 requirement: ± 1.0%)

CONFORMITY CE 93/42/EEC

ZERO DRIFT < ± 0.001 nA

ZERO SHIFT < ± 0.001 nA

DISPLAY LCD, 2 x 20 with 5/16" characters

INPUT BNC two lug, triaxial connector

BIAS VOLTAGE Nominal ± 450 volt bias

5 USER SETTINGS: – 450, – 300, – 150, 0; 150, 300, 450 (VDC)

ACCURACY: ± 0.3 volt

POWER 100-240 VAC, 0.5 A max, 50/60 Hz input to external power supply, 9 VDC, 1.7 A power supply output to electrometer input, UL/TUL listed power supply; internal battery: 8 hrs per charge

ZEROING Automatic zero function, user activated

DIMENSIONS Height: 2.75 in, 7 cm Width: 8.24 in, 22.2 cm
Length: 9 in, 23 cm Weight: 3.0 lbs, 1.4 kg

Specifications subject to change without notice.



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