CRC-BETA® *EC* Enhanced Counter

- Auto assay of pure Beta emitting radio nuclides such as Sr-89, P-32 and Y-90
- Optimized counting geometry with auto compensation for sample container and volume
- User definable calibration factors for over 20 nuclides
- Automatic background subtraction, System test, QC programs and Auto-calibration
- On-screen display of Nuclide Activity, Count Rate, Counting Period and Energy Histogram
- User selectable thresholds for Background,
- Counting Precision and Impurity level
- Optional printer for full reports of assayed radionuclides, daily test results and diagnostics
- Fast accurate measurement of today's newest radiopharmaceuticals including Y-90

The Capintec Beta "EC" Enhanced Counter adds a new dimension to radionuclide measurement.
Engineered specifically for pure Beta emitters such as P-32, Sr-89 and Y-90, the Beta "EC" takes the guesswork and errors out of your Beta assays.
Exacting attention to sample container, sample volume, activity concentration and impurity containment assure you accurate and precise results every time.
Based upon optimized electronics and counting geometries, the Beta "EC" offers uncompromised measurements combined with fast response times.

As a leader in energy measurement devices, Capintec's goal is to meet your demands with the latest, highest quality, cost effective solutions.
Product Details
The Beta "EC" offers physicians and radio pharmacies the most accurate method for proper assaying of activity. Time previously spent trying to optimize your dose calibrator for proper assaying is eliminated. Reproducible geometries and fine tuning calibration numbers are all things of the past thanks to the sophisticated architecture of the Beta "EC".

Using an optimized detector assembly, procedures are quickly performed with all results displayed on an easy-to-read graphic panel. Information for sample container type, selected nuclide and impurity factors are easily set via the step-through menu and system keyboard. Trigger thresholds for background rates, impurity levels and counting precision values are user definable along with readings in curies or Becquerels.

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System memory accepts calibration factors for over 20 radio nuclides with compensation values for sample containers. Other capabilities include test source data storage with automatic decay correction for today's time and date. System tests, auto-calibration and QC tests are built-in along with automatic background subtraction. An optional printer offers hard copy print-outs of all information displayed on the screen plus diagnostic and daily test information for quick reference.

Specifications:

Detector
Type Nal (TI) scintillator optimized for Beta counting
Sample Distance 10 cm (4") and 20cm (8")
Shielding 0.6cm (1/4) lead
Cabling 91 cm (36") triaxial cable
Measurement Range
Type Auto Ranging
Activity 100 mCi of Sr89, typical (also measures up to ~1mCi of Gamma emitters)
Counting Rate 50 kcps, max.
Measurement Periods
Type User definable
Range 2 sec. min. 1800 sec. max. 6 sec., typical
Trigger Levels
Type Background, counting precision and containment level
Range User definable
Energy Discrimination
Channels Fixed 6 channel MCA
Channel Ranges Ch 1: 30-100 keV
Ch 2: 100-200 keV
Ch 3: 200-400 keV
Ch 4: 400-660 keV
Ch 5: 660-800 keV
Ch 6: Over 800 keV

Tests
Diagnostics Full test of program, system memories
Calibration Automatic with Cs-137 source
Daily Automatic background subtraction and instrument test
Overall Accuracy
Accuracy Better than ± 5% relative to a standard sample used to calibrate the system
Standard Source Data
System Memory Cs-137 Standard Source
Display Screen
Type Liquid Crystal Display (LCD)
Format 128 columns x 64 rows
Readings Direct in cpm, cps, conversion to mCi or MBq with conversion factors
Detector Inserts
Test Source 30 cc "E" vial, 10cc vial
Syringes 3cc, 5cc, and 10cc
Printer (Optional)
Interface Rs-232C Protocol
Type Two color, strip method
Capabilities Printing of measured results and tests
Display Unit
Dimensions 11.1 cm x 18.4 cm x 28.6 cm (4.375" x 7.25" x 11.25")

CRC-BETA EC Calibrator

ACCESSORIES

CRC-AD15 Auxiliary Display

Auxiliary Lead Shield For Beta Counter

RS-232 Serial Port

Okidata Dot Matrix Printer

Epson Roll Printer

Epson Ticket Printer

CRC-15R Enhanced Software

Replacement Well Dipper

Replacement Well Liner

REFERENCE SOURCES

Co-57 370MBq

Cs-137 7.4 MBq