ATOMLAB 400

DOSE CALIBRATOR

Designed for facilities receiving unit doses including PET and Beta.

The Atomlab 400 Dose Calibrator provides fast, accurate radionuclide activity measurements with performance that easily complies with the most stringent regulatory requirements.

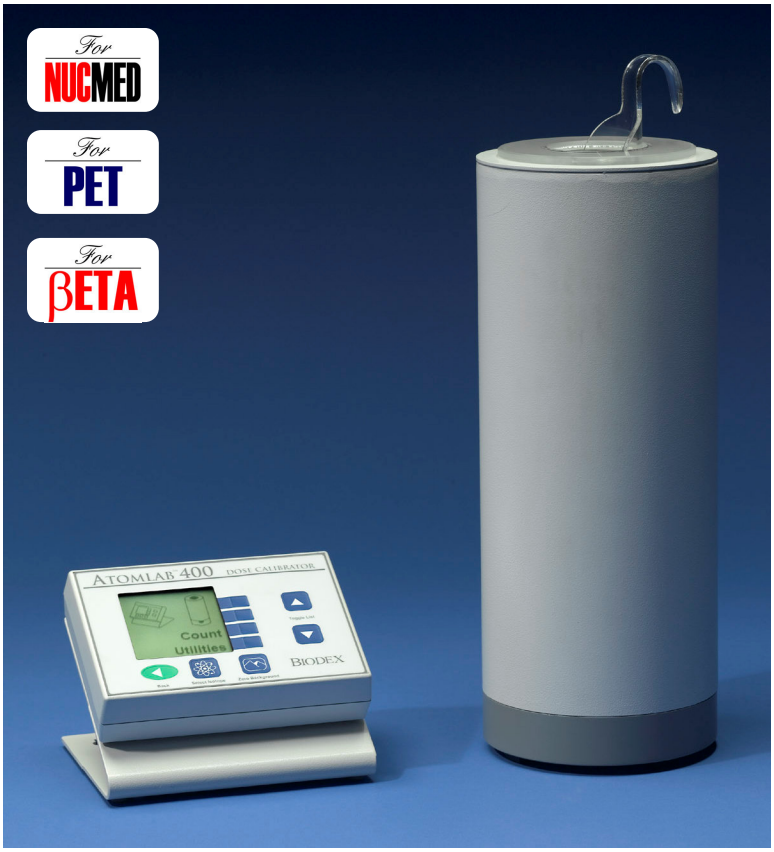
The unit is simple to operate. There is a routine list of ten pre-programmed isotopes plus another seven that can be user defined. Any four isotopes will be displayed at a time. In addition, there is a library containing 88 isotopes listed alphabetically, including Y-90 and Sr-89.

Activity is displayed on a LCD panel in either curie or becquerel units. Background correction is performed at the touch of a button. Range selection is automatic.

Activity measurements are performed by a microprocessor-controlled electrometer located within the detector assembly of the ionization chamber. The chamber is shielded with .25" (6.3 mm) lead. It can be located up to eight feet away from the display unit. Chamber bias is generated within the display unit by an electronic high voltage supply, eliminating the need for expensive battery changes.

The RS-232 port enables the Atomlab 400 to communicate with most commercially available nuclear medicine management systems.

The Atomlab 400 Dose Calibrator is backed by Biodex's industry exclusive two-year warranty.



FEATURES:

- ***Pre-programmed for 88 most commonly used radionuclides***
- ***Large, easy-to-read backlit LCD***
- ***Small footprint economizes workspace***
- ***Ultra fast response***
- ***Automatic range selection; ranges up to 40 curies of Tc-99m or 10 curies of F-18***
- ***Displays in curies or becquerels***
- ***Remote Ionization Chamber***
- ***Self-Diagnostic Software***
- ***Desktop or wall mount display***
- ***RS-232 bi-directional serial communications port***

J. Gravengaard Corporation Medical Imaging Sales & Service

PO Box 20171 Portland, Oregon 97294 Nationwide (800)796-SCAN Local (503)255-0535 Fax (503)255-7047

SPECIFICATIONS:

Isotope Selection Keys: Ten pre-programmed – Tc-99m, Co-57, Cs-137, I-131, In-111, Ga-67, Xe-133, I-123, T1-201, and Mo-99; seven additional keys for user-set isotopes; two new isotope keys and a full alphabetical list of 88 isotopes.

Activity Range: 0.1 uCi to 40Ci (.001 mBq to 1500 GBq) of Tc-99m

Energy Range: 25 keV to 3 MeV photons

Response Time: One to two seconds for doses greater than 200 uCi; three seconds for doses greater than 20 uCi; 50-100 seconds below 20 uCi of Tc-99m with default threshold, threshold adjustable to reduce counting time

Detector Linearity: ± 1 % or 0.2 uCi, whichever is greater

Electrometer Linearity: ±1% or 0.2 uCi, whichever is greater

Electrometer Accuracy: ±1% or 0.2 uCi, whichever is greater

Overall Accuracy: ± 3% or 0.3 uCi, whichever is greater; overall accuracy is affected by such factors as the accuracy of the specific source calibration, geometric variations due to sample volume or configuration, detector linearity, electrometer accuracy and readout accuracy

Repeatability: ±0.3% above 1 mCi short term (24 hr); 1% long term (one yr.); exclusive of background

Detector: Well-type pressurized ionization chamber, with Argon fill gas; well opening 2.75" (7 cm), well depth 10.25" (26 cm)

Chamber Gas Pressure: 149KPa gauge (21.6 psig) at 20 degrees C or 250KPa absolute (36.3 psia) at 20 degrees C. IATA regulation 3.2.2.4 Exempts Gases of Division 2.2 from Dangerous Goods Regulations when transported at pressure less than 200KPa gauge (29 psig) at 20 degrees C. Device is shipped standard goods.

Detector Shielding: .25" (6.3 mm) lead on all sides except top well opening; supplementary shielding available

Chamber Bias: 355 ± 5 volts

Environmental Operating Conditions:

Temperature: 0-40° C

Humidity: 0-90% rh, non-condensing

Power Requirements: 100 to 240 VAC, 0.6 – 0.3 amps, auto switching; APS Power Supply (APS22ES-1 50160), for medical use.

Line Frequency: 50/60 Hz; detachable line cord; built-in EMI filter and transient suppression

Detector and Interface Cables: 8' (243 cm) long, six conductor cables (two carry power, two for chassis ground, two carry serial data for digital I/O)

Physical:

Display Unit:

Dimensions: 6.75" w x 6" d x 5" h (17.1 x 15.3 x 12.7 cm)

Weight: 3.6 lb (1.64 kg); desktop or wall mountable

Detector Unit:

Dimensions: 6" dia x 15.5" h (15.24 x 39.37 cm)

Well I.D.: 2.75" dia x 10.5" h (7 x 26.7 cm)

Well I.D. with Liner: 2.5" dia x 10.25" h (6.35 x 26 cm)

Lead Shielding: .25" thick (6.3 mm)

Weight: 35 lb (16 kg)

Approvals: ETL to UL 60601-1 and
cETL to CAN/CSA C22.2 No. 601-1-M90

Warranty: Two years

086-335 Dose Calibrator, Atomlab 400, 100-240 VAC $5,800.00
Includes RS-232 port, Vial/Syringe Dipper and Well Insert.

Related:

086-336 Chamber, Dose Calibrator.....$5,500.00
086-338 Dose Calibrator Shielding Rings, Interlocking, 2" lead $2,300.00
Additional protection from high energy activity.
086-423 Moly Shield, Vial, .28" lead 125.00
086-435 Moly Shield, Syringe, .28" lead 425.00
086-509 Lineator 495.00
086-334 Cable, European wall outlet.....15.00

Replacement:

086-242 Vial/Syringe Dipper $70.00
086-241 Well Insert 70.00

Prices subject to change without notice.

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