

*"The Clinical Advantage"™*

# ATOMLAB™

DOSE CALIBRATORS • WIPE TEST COUNTER

PROVEN  
PERFORMANCE FOR  
FAST, ACCURATE  
MEASUREMENTS.

**NEW**



**NEW**



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# ATOMLAB™ 500 Dose Calibrator

## UPGRADE-ABILITY

The Atomlab™ 500 Dose Calibrator can be upgraded to include a fully functioning Atomlab™ Wipe Test Counter. The “Smart Display” recognizes the chamber / detector configuration and instantly reconfigures the screen to the appropriate icons.



## Easy to use, touch-screen display with intuitive menus.

- Windows® 10 Operating System
- Microsoft SQL Database
- Communicates with most commercially available NM management systems via Ethernet or Serial Port
- Pre-programmed for 97 most commonly used radionuclides; any 12 can be conveniently touch selected
- Extensive Isotope Libraries
- Automatic range selection up to 100 Curies of Tc-99m or 25 Curies of F-18
- Ultra-fast response
- Displays in Curies or Becquerels
- USB connectivity for external monitor, printer, and software upgrades
- Report and label printers available
- Easy to use, color touch-screen display with intuitive menus
- Small footprint economizes workspace
- Upgradeable at any time to include a wipe test counter
- Two-year warranty



Standard Apps for Atomlab 500 include:

- Automated Quality Assurance Apps
  - Constancy and Expanded Constancy
  - Linearity and Auto Linearity
  - Accuracy
  - Geometry
- Nuclear Pharmacy Apps
  - Future dose and volume computation
  - Half-Life Verification
  - Moly Assay

# One dose calibrator that can be used for a wide variety of Nuclear Medicine, PET and radioimmunotherapy applications.

## Atomlab™ 500

The Atomlab 500 can be used for a wide variety of nuclear medicine, PET and radioimmunotherapy applications, with proven performance for fast, accurate measurements. The system consists of a low pressure ionization chamber, electrometer with extraordinary linearity, and an auto-ranging color touch-screen display. Additionally, there are advanced, but easy-to-use programs for nuclear pharmacy.

Activity measurements are performed by the microprocessor controlled electrometer located within the chamber assembly. 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 by an electronic high voltage supply, eliminating the need for expensive battery changes.

Every element of the design and technical development will increase dose accuracy, department productivity and regulation compliance. The attractive and intuitive human interface guides the user through each operation. Software can easily be updated via the Biodex website or by using a convenient USB memory device.

In addition to powerful self-diagnostics, the Atomlab 500 includes an exclusive chamber monitoring technology to ensure longer life and accuracy. Integrated pressure and temperature sensors feedback data so that the influence of gas pressure change will not affect an accurate reading.

## OPERATION

The system is easy to use. There are 12 isotope selection touch keys pre-programmed for the most commonly used radionuclides. Any of those keys can be reprogrammed by the user for a desired isotope. There are 97 isotope-specific dial values listed in the library. Dial values can easily be changed if required.

Activity is displayed on the touch screen color display in either Curie or Becquerel units. Background correction is performed at the touch of a button. Range selection is automatic, from .01 microcurie to 100 Curies of Tc-99m or 25 Curies of F-18.

## QUALITY ASSURANCE

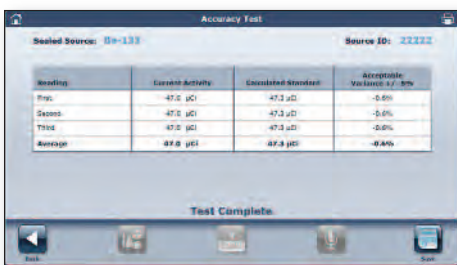


The Atomlab 500 has been designed to make life easier. The extensive selection of quality assurance applications streamlines and simplifies hot lab administration requirements. The system stores and decay corrects multiple reference sources and compares the measured activity to the calculated activity for the daily constancy test.

Linearity tests can be performed in the traditional manual method or by a fully automated program that allows for readings from a source to be taken, and automatically recorded at specified intervals. The system will graph the results.

The attenuation tube test for linearity can be performed using software that will guide the user through the procedure, store the values and make all calculations.

## ACCURACY



Atomlab Dose Calibrators have a reputation for being extremely accurate. Biodex and chamber manufacturer Sun Nuclear Corporation have participated in the isotope program sponsored by National Institute of Standards and Technology. Each month a certified isotope is received from National Institute of Standards and Technology and is measured in the Atomlab™ Dose Calibrator, producing direct traceability to National Institute of Standards and Technology.

# ATOMLAB™ 500 DOSE CALIBRATOR



Constancy Test View Details

Date	Detector S/N	Serial Service	Source ID	Measured Activity	Calculated Standard	Acceptable Variance +/- %	Staff
5/9/2017	938516	Cx157	403	200 µCi	164.8 µCi	2.0%	BJW

Isotope	Isotope Activity	% Variance	Isotope	Isotope activity	% Variance
Cs-137	200 µCi	0.1%	Tc-99m	189.3 µCi	0.1%
Co-60	200 µCi	0.0%	Ir-192	200 µCi	0.2%
I-131	100 µCi	-0.5%			
I-125	100 µCi	0.1%			
Re-187	200 µCi	0.2%			
Th-201	100 µCi	0.6%			
Am-241	100 µCi	0.2%			

▲ Constancy Data

Moly Assay

Moly Assay is Complete  
Make Note of the Concentration Before Exiting

Moly Breakthrough Reading: -2.02 µCi

Tc-99m: 0.54 µCi

Moly Concentration: 0.000 µCi Mo-99/mCi Tc-99m

▲ Moly Assay

Geometry Test View Details

Test Date: 5/9/2017 Isotope: Tc-99m Normalized Volume: 1.0 ml  
Detector S/N: 70971060 Staff: NR

Volume	Measured Activity	Calculated Activity	Correction Factor (Not Applicable) 0.05-1.05 Allowable
1.0 ml	41.2 mCi	41.2 mCi	1.00
2.0 ml	41.1 mCi	41.2 mCi	1.00
3.0 ml	42.3 mCi	41.2 mCi	0.97
4.0 ml	41.9 mCi	41.2 mCi	0.98
5.0 ml	41.5 mCi	41.1 mCi	1.00

Container Description: Type: Syringe Size: 5 ml Material: Plastic

▲ Geometry Test

# Easy to use color touch-screen with intuitive menus.

## COMMERCIAL NUCLEAR PHARMACY



The Atomlab 500 Dose Calibrator features a nuclear pharmacy “Dose Calculation Screen” to meet the needs of a commercial nuclear pharmacy. All the information needed to draw doses efficiently is readily available on one screen. The feature easily performs pre- and post-decay calculations, volume calculations for specific times and isotope changes all with minimal screen touches. No calculators needed!

Atomlab Dose Calibrators can read up to 100 Curies of Tc-99m, thereby eliminating the need for an aliquot preparation, a significant time saver every time a generator is milked.

## COMMUNICATIONS

Ethernet and serial port to communicate with most commercially available nuclear medicine management systems. USB connectivity for external monitor, printer and software upgrades.

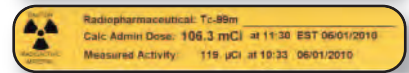
*Specifications featured inside back cover.*



086-341, Optional label printer for Atomlab 500 and Atomlab 500Plus

## Sample Labels for Future Dose with Dose in Chamber

Future Dose Record	
Patient: _____	Procedure: _____
Id #: _____	KIT: _____
Prepared By: _____	Lot #: _____
Isotope: Tc-99m	
Calc Admin Dose: 106.3 mCi at 11:30 EST 06/01/2010	
Measured Activity: 119. $\mu$ Ci at 10:33 06/01/2010	
Administered By: _____	



## SOFTWARE UPDATES

Your Atomlab 500 Dose Calibrator is upgradable. You can easily install software updates via the Biodex website or by using a convenient USB memory device.



▲ QA Page



▲ Half-Life

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 Int'l 631-924-9000

# ATOMLAB™ Wipe Test Counter

## UPGRADE-ABILITY

The Atomlab™ Wipe Test Counter can be upgraded to include a fully functioning Atomlab™ Dose Calibrator simply by adding a new chamber. The “Smart Display” detects which chambers are connected and instantly reconfigures the screen to the appropriate icons.



## Eliminate the tedium of wipe testing.

An extensive selection of quality assurance applications streamlines and simplifies hot lab administration requirements.

- Windows® 10 Operating System
- Microsoft SQL Database
- Communicates with most commercially available NM management systems.
- USB connectivity for external monitor, printer, and software upgrades
- 64 Channel MCA
- **NEW** Manual MCA Program
- Adjustable wide window and individual isotopes
- 2x2 NaI drilled-well detector
- Remote shielded well
- Energy spectrums with individual ROI
- Ability to help identify isotopes causing contamination
- User-specific wipe locations and trigger levels
- Wipes that exceed trigger levels are immediately recognized
- Detailed wipe reports including cpm and dpm
- Wipe testing results stored
- Upgradable at any time to a dose calibrator by adding an ionization chamber
- Report and label printers available
- Two-year warranty



Standard Apps for Atomlab Wipe Test Counter include:

- Automated Quality Assurance Apps
  - Full Width at Half Max (FWHM)
  - Chi Square
  - Minimum Detectable Activity (MDA)

The Atomlab Wipe Test Counter is easy to use, easy to understand, fast and dependable. A color touch-screen display utilizing intuitive software eliminates the tedium of wipe testing. Simply perform a daily calibration and background count, then count the wipe for each predetermined location. Trigger levels can be set for any isotope at any location including 200 dpm for iodine. In seconds the system will determine if the location is above or below the user defined trigger level.

When performing a wipe test, the full spectrum is displayed. A wide window that includes the isotope energies expected in a particular department is set by the user. The efficiencies of the isotopes selected for the window can be either factory defaults or user determined using an integrated detector efficiency program. Individual isotope ROIs along with the wide window can be set. This feature helps identify the isotope(s) causing contamination.

# Easy to use, easy to understand.

The user may define an unlimited number of "Area" names and wipe "Locations" and designate them as restricted area, unrestricted area, sealed source or package. The Wipe Test Program automatically calculates net contamination levels and reports results in dpm, uCi and Bq.

The system consists of a lead shielded 2" x 2" sodium iodide (NaI) well detector and a 64 channel multi-channel analyzer. The displayed energy range (spectrum) is 0-800 KeV, which is typically found in nuclear medicine departments.

The wipe counter is designed to meet or exceed all NRC (10 CFR 35.70, 10 CFR 20.1906 and 10 CFR 35.2067) and state wipe test requirements. There are automated programs for the quality assurance functions: calibration, FWHM, chi-square and minimum detectable activity (MDA).

Wipe test results and QA test data can be stored in memory and printed at any time.

## MANUAL MCA PROGRAM

For performing sample counts and analysis beyond the scope of the standardized programs.

- Expandable library of 34 commonly used isotopes
- Unlimited user-defined isotopes
- Three counting methods: preset time, preset ROI, and continuous counting

In addition to providing "standardized" programs for routine test and survey procedures, the Atomlab 500 now offers a "manual" program to accommodate other counting and spectrum analysis tasks. The user can select from three counting methods: preset time, preset ROI counts, and continuous counting. After any count, the Spectrum Analysis option can be used to produce a Spectrum Analysis Report. The monitor shows when a test is in progress, and graphically displays the spectrum, time, counts and cpm.

*Specifications featured inside back cover.*

*Wipe Test Chamber shown with optional lead shield.*



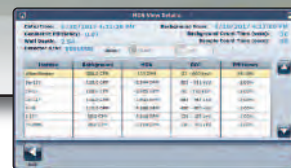
▲ Wipe Test Passed



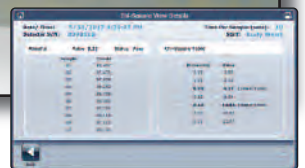
▲ Wipe Test Failed



▲ QA Display (Wipe)



▲ MDA (Wipe)



▲ Chi Square

# ATOMLAB™ 500Plus Dose Calibrator

## Dose Calibrator + wipe Test Counter



Atomlab™ 500Plus... comprehensive, easy-to-use and feature rich.



# One solution for all your molecular imaging needs.

*The Atomlab 500Plus Dose Calibrator brings it all together - science, technology and application.*

The Atomlab 500Plus combines the industry gold standard Atomlab 500 Dose Calibrator and Wipe Test Counter, offering you a complete and cost-effective solution for all of your molecular imaging needs. The intuitive Atomlab 500Plus provides fast, accurate radionuclide activity measurements with performance that complies with the most stringent regulatory requirements. It's comprehensive, easy-to-use and feature rich. The software mirrors the way you think and work. It guides when necessary, but does not

burden the advanced user. The touch-screen and easy-to follow on-screen prompts mean you won't need "cheat sheets."

When required, you can be confident that every operation is captured and documented. That documentation makes compliance a breeze. The Atomlab 500 Dose Calibrator is upgradable. You can easily install software updates via the Biodex website or by using a convenient USB memory device.

- *Windows® 10 Operating System*
- *Microsoft SQL Database*
- *Communicates with most commercially available NM management systems via Ethernet or Serial Port*
- *Preprogrammed for 97 most commonly used radionuclides; any 12 can be conveniently touch selected*
- *Automatic range selection; up to 100 Curies of Tc-99m or 25 Curies of F-18*
- *Remote shielded ionization chamber*
- *Ultra-fast response*
- *Displays in Curies or Becquerels*
- *64 Channel MCA*
- ***NEW** Manual MCA Program*
- *Remote shielded well*
- *Adjustable wide window and individual isotopes*
- *Energy spectrums with individual ROI*
- *Ability to help identify isotopes causing contamination*
- *2 x 2 NaI drilled-well detector*
- *User-specific wipe locations and trigger levels*
- *Wipes that exceed trigger levels are immediately recognized*
- *Detailed wipe reports including cpm and dpm*
- *Wipe testing results stored*
- *Intuitive software with extensive functionality*
- *USB connectivity for external monitor, printer, and software upgrades*
- *Report and label printers available*
- *Easy-to-use, color touch-screen display with intuitive menus*
- *Small footprint economizes workspace*
- *Two-year warranty*



## Standard Apps for Atomlab 500Plus include:

- *Automated Quality Assurance Apps*
  - *Constancy and Expanded Constancy*
  - *Linearity and Auto Linearity*
  - *Accuracy*
  - *Geometry*
  - *Full Width at Half Max (FWHM)*
  - *Cbi Square*
  - *Minimum Detectable Activity (MDA)*
- *Nuclear Pharmacy Apps*
  - *Future dose and volume computation*
  - *Half-Life Verification*
  - *Moly Assay*

*Specifications featured inside back cover.*

# ATOMLAB™ 500Plus DOSE CALIBRATOR

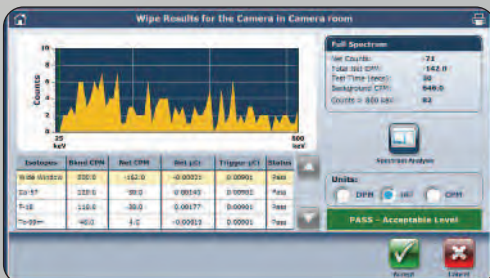
## ONLINE DEMONSTRATIONS & TRAINING One-On-One Sessions at NO CHARGE



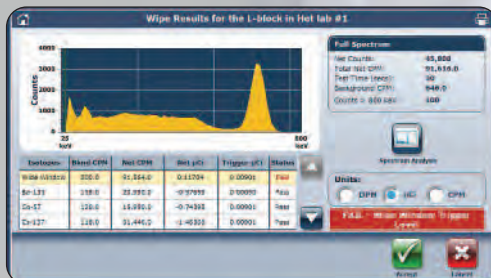
Experience the same level of personal instruction as if we were on-site.

Currently available to customers in the USA.

DOSE CALIBRATORS • THYROID UPTAKE • PULMONEX



▲ Wipe Test Passed



▲ Wipe Test Failed



▲ QA Display (Dose)

# A complete Hot Lab Management system



▲ Linearity Decay (Dose)

*"The Clinical Advantage"<sup>TM</sup>*

## SIMPLIFY DAILY OPERATIONS



- **NMIS or BioDose** for nuclear medicine department management
- **BioRx or RMIS** for the nuclear pharmacy
- **BioTrax QMS** for complete Quality Management for GMP production

The Atomlab™ 500 Dose Calibrator integrates seamlessly with ec<sup>2</sup> Software Solutions Management Systems, forming a comprehensive isotope tracking package.

What's the advantage of this combination?

Save time across the board – from loading and measuring a dose, to maintaining easy records and ultimately satisfying the inevitable audit, painlessly. The combined result is communication and tracking at its finest... from two powerful companies dedicated to providing a single source for isotope measurement and management. For more information about ec<sup>2</sup> Software Solutions visit [www.ec2software.com](http://www.ec2software.com).

Atomlab &  - now that's easy!

**BIODEX**

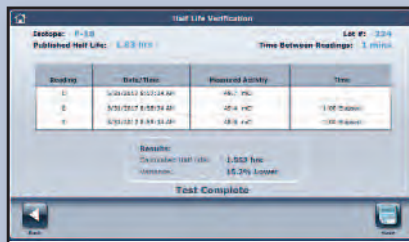
# ATOMLAB™ 500 and 500Plus Features

- A “zero background” feature allows users to configure system background count time for 30, 60 or 100 seconds. This feature changes the counting time when selecting the “zero background” button in all functions including the moly assay application.
- Isotope libraries in both the dose calibrator and wipe test counter include Lu-177 and Ra-223 isotopes. Libraries include updated dial values, isotope ROIs and efficiency settings.
- Half-Life Verification App included in the nuclear pharmacy menu. Simply select the isotope, choose two or three readings for the calculation, and set the time between readings. The results show the calculated half-life and the variance to the real half-life for the selected isotope.

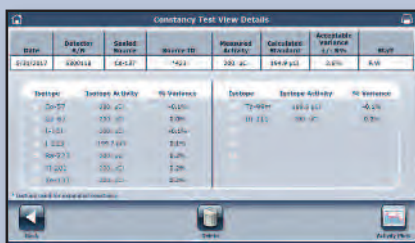
## Proven Accuracy & Quality Assurance



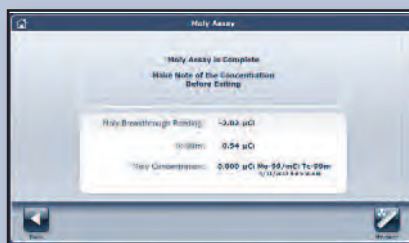
**QA Dose Calibrator Screen**  
– The extensive selection of quality assurance applications is readily available and simplifies regulatory requirements.



**Half-Life Verification Screen** – Results show the calculated half-life and the variance to the published half-life for the selected isotope.



**Constancy Data Screen** – System stores and decay corrects multiple reference sources, compares the measured activity to the calculated activity and displays the percent variance. Data and source activity plots can be displayed, printed or stored.



**Moly Assay Results Screen** – Application simply guides you through the moly assay process making it quick and easy to perform, and displays the Moly concentration when test is complete. The system will prompt you if the results are not within regulatory limits.

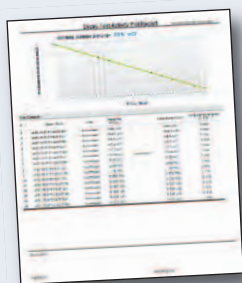


**Linearity Decay Plots Screen** – Linearity tests can be performed using the traditional manual method or with the fully automated program featuring the capability to capture readings from a source, while automatically recording at specific intervals.



**Dose Calculation Screen** – All the information needed to draw doses efficiently is readily available on one screen. Easily performs pre- and post-decay calculations, volume calculations for specific times, and changes isotopes all with minimal screen touches. No calculators needed!

## Quality Assurance Reports



### Linearity Decay Plots

Report shows isotope, initial activity, elapsed time of readings, calculation method and variance, visually plotted.



### Detailed Constancy Data

An Expanded Constancy test allows the user to measure a long-lived source and up to 14 routinely used isotope settings, all in a matter of seconds with just one touch of the screen. The system stores and decay corrects multiple reference sources and compares the measured activity to the calculated activity for the daily constancy test.

Full-size samples can be viewed at [www.biodes.com/dosecalibrators](http://www.biodes.com/dosecalibrators)



## some of the many facilities benefiting from Atomlab Dose Calibrators.

Banner MD Anderson Cancer Center  
 Bethesda Memorial  
 Boca Raton Regional Hospital  
 Brigham and Womens Hospital  
 Bronx Lebanon Hospital  
 Brookhaven National Lab  
 Cedars Sinai Medical Center  
 Children's of Alabama  
 Children's Hospital National  
 Medical Center  
 Cleveland Clinic Weston  
 Cleveland Regional Medical Center  
 Colorado State University  
 Columbia Pet Center  
 Columbia University  
 Crozer-Chester Medical Center  
 Dana Cancer Center  
 Doctors Hospital of Sarasota  
 Duke Health Raleigh Hospital  
 Duke Medical Center Bryan  
 Neuro Research Facility  
 Duke Raleigh Hospital  
 Emory University  
 Florida Hospital Celebration  
 Florida Hospital Flagler  
 H Lee Moffitt Cancer Center  
 Henry Ford Medical Center  
 Indiana University Health Saxony

Joe DiMaggio Hospital  
 Mayo Clinic  
 Mayo Foundation  
 Medical Center of Aurora  
 Miami Children's Hospital  
 Mount Sinai Hospital  
 Mount Sinai School of Medicine  
 National Institute of Standards  
 and Technology  
 Nationwide Children's Hospital  
 Naval Hospital Camp Pendleton  
 Naval Medical Center  
 NCI Frederick  
 New York Downtown Hospital  
 North Shore Long Island  
 Jewish Hospital  
 Northwestern Medical Center  
 Northwestern Memorial Hospital  
 Ochsner Health System  
 Oklahoma Pet Center  
 Oklahoma State University  
 Vet Medical Teaching Hospital  
 Palo Alto Medical Foundation  
 Phoenix Children's Hospital  
 Pocono Medical Center  
 Presbyterian Rust Medical Center  
 Purdue University School of  
 Nuclear Pharmacy

Rapid City Regional Hospital Inc.  
 Rhode Island Hospital  
 Rockdale Medical Center  
 Salem Hospital  
 Stony Brook University Medical  
 Center-Univ Physicians  
 Tampa General Hospital  
 Texas A & M University  
 UMASS Memorial  
 University Medical Center of El Paso  
 University of Arizona  
 University of California Los Angeles  
 University of Cincinnati  
 University of Illinois  
 University of Illinois Medical Center,  
 Chicago  
 University of Iowa Hospital and  
 Clinics  
 University of Louisville  
 University of Medicine and  
 Dentistry of New Jersey  
 University of Oklahoma  
 University of Pittsburgh  
 University of Tennessee  
 University of Virginia  
 University of Virginia Medical  
 Center - Charlottesville  
 UPMC East

VA Medical Center, Baltimore  
 VA Medical Center, Bay Pines  
 VA Medical Center, Boston  
 VA Medical Center, Dallas  
 VA Medical Center, Dayton  
 VA Medical Center, Denver  
 VA Medical Center, Durham  
 VA Medical Center, Iowa City  
 VA Medical Center, Las Vegas  
 VA Medical Center, Loma Linda  
 VA Medical Center, Miami  
 VA Medical Center, Mountain Home  
 VA Medical Center, Phoenix  
 VA Medical Center, Salem  
 Virginia Polytechnic Institute and  
 State University  
 Walter Reed National Naval  
 Medical Center  
 Washington University  
 William Beaumont Army Medical  
 Center  
 Womack Army Medical Center

**Will we be adding your facility to the list?**

View more users at  
[www.biodesx.com/dose500plus](http://www.biodesx.com/dose500plus)

## ACCESSORIES

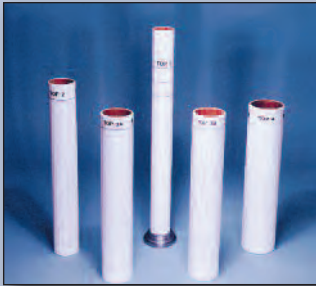
### MOLY ASSAY SHIELD



Moly Assay Shields are a convenient method to a unit dose. Whether working with syringes or vials, either unit will fit into the well chamber of any Atomlab Dose Calibrator.

- 086-435** Moly Assay Shield, Syringe, .3" lead
- 086-423** Moly Assay Shield, Vial, .3" lead

### LINEATOR



The Lineator is a simple device to accurately and reliably verify the linearity of your dose calibrator. Test results are available in minutes, without waiting days for decay, making it feasible to perform a linearity test more often. Early identification can prevent problems before they occur.

- 086-509** Lineator

### DOSE CALIBRATOR SHIELDING RING



The Dose Calibrator Shielding Ring offers an additional 2.25" of lead shielding around the remote chamber for working with 511 keV radionuclides, such as FDG F-18.

- 086-338** Shielding Rings, Interlocking, 2.25" lead  
*Fits Atomlab Dose Calibrators 500 and 500Plus. For additional protection from high energy activity.*

### LEAD SHIELD



The optional lead shield provides an additional .5" of shielding around the Wipe Test Chamber to reduce background activity, and when working with higher energy isotopes. The shield also includes a .5" lead shielded cover for the well opening.

- 075-596** Lead Shield, Wipe Test Chamber

### VIAL/SYRINGE DIPPER



This rugged, Vial/Syringe Dipper has a comfortable handle and it will hold 1 cc to 10 cc syringes or up to a 30 ml vial. Included with every Atomlab Dose Calibrator, the Vial/Syringe Dipper will also fit any well chamber with 2.5" x 10" interior dimension. The material used will not cause attenuation problems and is very resistant to breaking.

- 086-242** Dipper, Vial/Syringe



### Atomlab™ 500

#### SPECIFICATIONS:

**All-In-One Flat Panel Display:** 10.8" Color Touch-Screen, Windows 10 Operating System and USB connectivity.

**Dimensions:** 11" w x .375" depth x 7" (28 x 1 x 18 cm)

**Line Voltage:** 100 to 240 VAC, auto selectable by the power supply

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

**Auxiliary Port:** Two USB ports, one RS-232 port

**Isotope Selection Keys:** Twelve pre-programmed – Tc-99m, Tl-201, I-123, I-131, Cs-137, Co-57, Xe-133, Ga-67, In-111, F-18, Y-90s, Ba-133 and a full alphabetical list of 97 isotopes.

**Activity Range:** 0.01  $\mu$ Ci to 100 Ci (.0004 MBq to 3700 GBq) of Tc-99m or 25 Ci of F-18

**Energy Range:** 25 keV to 3 MeV photons

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

**Electrometer Linearity:**  $\pm 1\%$  or 0.2  $\mu$ Ci, whichever is greater, up to 40 curies of Tc-99m,  $\pm 1.5\%$  up to 100 curies of Tc-99m

**Electrometer Accuracy:**  $\pm 1\%$  or 0.2  $\mu$ Ci, whichever is greater

**Overall Accuracy:**  $\pm 3\%$  or 0.3  $\mu$ Ci, 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:**  $\pm 0.3\%$  above 1 mCi short term (24 hr); 1% long term (one yr)

**Detector:** Well-type pressurized ionization chamber, with Argon fill gas

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

**Detector Linearity:**  $\pm 1\%$  or 0.2  $\mu$ Ci, whichever is greater

**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" lead (6.3 mm)

**Weight:** 35 lb (16 kg)

**Power Requirements:** 100 to 240 VAC, 0.38 – 0.15 amps, auto switching

**Certification:** ETL listed to UL 60601-1 and to CAN/CSA C22.2 No. 601-1-M90

IEC 60601-1, IEC 60601-1-4 and IEC 60601-1-2 and CE marked

**Warranty:** Two years parts and labor

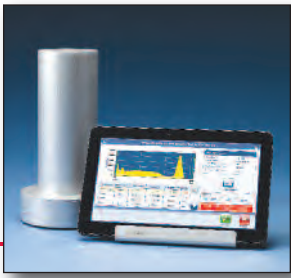


- 086-330** Dose Calibrator, Atomlab™ 500, 100-240 VAC

*Includes: Smart Display, ionization chamber,*

*RS-232 port, vial/syringe dipper and well insert.*

*Atomlab Dose Calibrators utilize low-pressure chambers and are shipped air or ground as standard goods.*



## Atomlab™ WIPE TEST COUNTER

### SPECIFICATIONS:

All-In-One Flat Panel Display: 10.8" Color Touch-Screen, Windows 10 Operating System and USB connectivity.

Dimensions: 11" w x .375" depth x 7" (28 x 1 x 18 cm)

Line Voltage: 100 to 240 VAC, auto selectable by the power supply

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

Auxiliary Port: Two USB ports, one RS-232 port

Memory: Stores wipe, calibration, background, high voltage, isotope specification, isotope efficiency, Chi-Square testing results, technologist list, wipe locations list and latest MDA calculation. Results can be displayed and printed.

Preset Radionuclides: 34 including Tc-99m, Co-57, Cs-137, Ga-67, Tl-201, I-123, I-125, I-131, In-111, F-18

### WELL COUNTER

Dimensions: 6" dia x 11" h (15.24 x 27.9 cm)

Weight: 29 lb (13.2 kg)

Detector: 2" x 2" NaI (Tl) integral line scintillation detector with a 0.75" dia x 1.44" depth well (1.9 x 3.7 cm)

Style: Remote Detector

Channels: 64

MCA: Integral to Well Counter

Spectral Resolution: FWHM 10%

Count Rate: (Maximum) 30,000 cps

Lead Shielding: 0.5" (1.2 cm) integral lead shield

Certification: ETL listed to UL 60601-1 and to CAN/CSA C22.2 No. 601.1.M90, IEC 60601-1, IEC 60601-1-4 and IEC 60601-1-2 and CE marked

Warranty: Two years parts and labor



### 086-331 Atomlab™ Wipe Test Counter

*Includes: Smart Display, well counter and RS-232 port.*



## Atomlab™ 500Plus

### SPECIFICATIONS:

*For specifications and features, see the Atomlab™ 500 Dose Calibrator and the Atomlab Wipe Test Counter. The Atomlab™ 500Plus incorporates the features and specifications of both units in one compact footprint.*



### 086-332 Dose Calibrator, Atomlab™ 500Plus, 100-240 VAC

*Includes: Smart Display, ionization chamber, well counter, RS-232 port, vial/syringe dipper and well insert.*

### RELATED PRODUCTS

#### Related: Dose Calibrator

**086-336** Chamber, Dose Calibrator

**075-594** Chamber, Wipe Test

**086-338** Shielding Rings, Interlocking, 2.25" lead

*For additional protection from high energy activity*

**086-509** Lineator

**086-435** Moly Shield, Syringe, .3" lead

**086-243** Copper Dipper, Vial/Syringe

**086-423** Moly Shield, Vial, .3" lead

**086-341** Printer, Label, Dymo

*Includes one roll 086-343 labels; two rolls 086-344 label*

**086-339** Printer, Ink Jet (report)

**086-334** Cable, European to Wall Outlet

**063-139** Rod Source, Cs-137, Calibrated, 0.1  $\mu$ Ci

**075-596** Lead Shield, Wipe Test Chamber

**006-350** Wipe Test Kits, 500/pkg

**086-342** Well Liners, Disposable, 100/pkg

#### Replacement:

**086-242** Vial/Syringe Dipper

**086-241** Well Insert

**086-343** Label, Blank, Lg, 300/roll

*(For Dymo Printer, 086-341)*

**086-344** Label, "Radioactive", Sm, 260/roll, 2/pkg

*(For Dymo Printer, 086-341)*

*An industry exclusive two-year warranty is standard.*

*For physics tests, sample reports, testimonials and warranty information, visit us on the web [www.biodex.com/dosecalibrators](http://www.biodex.com/dosecalibrators)*

# BIODEX

www.biodex.com

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Int'l 631-924-9000

*"The Clinical Advantage"™*

**NEW** Atomlab 500  
Dose Calibrator and  
Wipe Test Counter



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## ATOMLAB™ EASY

*Innovative Technology • Intuitive • Fast • Seamless*

[www.biodex.com/dose500plus](http://www.biodex.com/dose500plus)