

"The Clinical Advantage"™

NEW

ATOMLAB™ 500 *Plus*

Dose Calibrator & Wipe Test Counter

Combine the Atomlab 500 Dose Calibrator with the Atomlab Well Counter and create a complete, efficient and cost effective radioactivity measurement system...
the Atomlab 500*Plus*

...It's a complete Hot Lab Management System

ATOMLAB™ 500



Dose Calibrator



Wipe Counter



Dose Calibrator
Quality Assurance



Nuclear Pharmacy

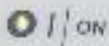


Wipe Counter
Quality Assurance



Utilities

TOUCH SCREEN TO RESTORE DISPLAY



BIODEX

For
NUCMED

For
PET

For
BETA

BIODEX

www.biodex.com
1-800-224-6339

Int'l 631-924-9000

ATOMLAB™ 500 Plus

New Improved performance, reliability and accuracy.

Dose calibrator and wipe test counter combined for all your requirements.

The Atomlab™ 500

The Atomlab 500 provides fast, accurate radionuclide activity measurements with performance that easily complies with the most stringent regulatory requirements.

- *Easy to use, large color touch screen with intuitive menus*
- *Automatic range selection; ranges up to 40 curies of Tc-99m or 10 curies of F-18*
- *Pre-programmed for 88 most commonly used radionuclides; any 12 can be conveniently touch-selected*
- *Displays in curies or becquerels*
- *Small footprint economizes workspace*
- *Ultra-fast response*
- *Robust software and extensive functionality*
- *Remote Ionization Chamber*
- *One wipe counter and up to six ionization chambers can be connected*
- *Quality Assurance Programs*
 - *Constancy*
 - *Expanded constancy*
 - *Linearity and auto-linearity*
 - *Accuracy*
 - *Geometry*
- *Radiopharmacy Applications*
 - *Future dose computation*
 - *Volume determination*
 - *Inventory control of 25 samples, correcting volume, activity and moly concentration*
- *Report and label printers available*
- *Self-diagnostic software*
- *Display desktop or wall mount*
- *Two-year warranty*
- *RS-232 bi-directional serial communications port*

The Atomlab™ WIPE TEST COUNTER

Finally, a wipe test counter that's easy to use, easy to understand, fast and dependable. A color touch-screen display, utilizing intuitive software, eliminates the tedium of wipe testing.

- *Easy-to-use, large touch screen with intuitive menus*
- *Meets NRC/State regulations*
- *64 Channel MCA*
- *Adjustable wide window and individual isotopes*
- *2x2 NaI drilled-well detector*
- *Remote shielded well*
- *Energy spectrums with individual ROI*
- *User-specific wipe locations and trigger levels*
- *Wipes that exceed trigger levels are immediately recognized: flashes on screen and prints in red*
- *Detailed wipe reports including CPM and DPM*
- *Automated QA testing, Chi square, FWHM and MDA*
- *Wipe testing results stored*
- *Optional printer for hard-copy archives*
- *Two-year warranty*
- *RS-232 bi-directional serial communications port*



▲ Atomlab™ 500 Plus

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www.biodex.com/dosecalibrators

ATOMLAB™ 500Plus
DOSE CALIBRATOR AND WIPE TEST COUNTER
Finally...one solution for all your molecular imaging needs.

Combine the Atomlab 500 Dose Calibrator with the Atomlab Wipe Test Counter and create a complete, efficient and cost effective radioactivity measurement system... the Atomlab 500Plus.

Consider the software that is supplied with the Atomlab 500Plus. 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.

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

The Biodex Atomlab 500Plus Dose Calibrator and Wipe Test Counter have brought it all together - science, technology and application.

The Atomlab™ 500Plus display can be mounted on a wall or placed on a desktop



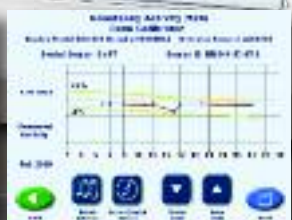
Wipe Test Passed



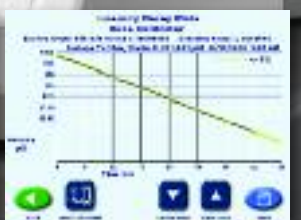
Wipe Test Failed



*QA Display
(Dose Calibrator)*



*Constancy Activity
(Dose Calibrator)*



*Linearity Decay
(Dose Calibrator)*

CONTROLLER (A single "Smart Display" controls both Dose Calibrator and Wipe applications)

Display: LCD Touch Panel 6.5" x 5", function keys are displayed for the operation being performed

Display Unit:

Dimensions: 9.5" w x 12" h x 12" depth (24.1 x 30.5 x 30.5 cm)

Weight: 4.2 lb (1.9 kg)

Connectors: RJ-12 for well cable, USB for printer

Power: This system uses XP Power Supply for Medical Use, Model #PDM60US15

SPECIFICATIONS:

Atomlab™ 500 Dose Calibrator

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-90, Mo-99; 25 user-defined isotopes and a full alphabetical list of 88 isotopes.

Activity Range: : 0.01 uCi to 40 Ci (.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 µCi, whichever is greater

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

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

Overall Accuracy: ± 3% or 0.3 µCi, 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)

Digital Calibration Dial: Four-digit dial with increment/decrement keys to change the value; range is from 0.0 to 999.9

Detector: Well-type pressurized ionization chamber, with Argon fill gas; well opening 2.75" (7 cm), well depth 10.25" (26 cm). Up to seven chambers can be serially connected to one display.

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, 0.38 – 0.15 amps, auto switching; XP Power Supply (PDM60US15), 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 chassis ground; two carry serial data for digital I/O)

Detector Unit:

Dimensions: 6" dia x 15.5" height (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)

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



Line Voltage: 100 to 240 VAC, auto selectable by the power supply, 1.5 – 0.75 amps

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

Auxiliary Port: RS-232 connector, used for data export and firmware updates

Memory: Stores for Wipe Test Counter: 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.

Memory: Stores for Dose Calibrator: Inventory and QA tests

SPECIFICATIONS:

Atomlab™ Wipe Test Counter DETECTOR CABLE

Length: Standard 8 ft. (2.43 cm); custom cable lengths available up to 20 meters

Conductors: Six total – 2 for power, two for chassis ground, two for serial data

Connectors: RJ-12

WELL COUNTER

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

Connectors: RJ-12 for power and signal

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

Optional Calibration Source: 0.1 µCi Cs-137 Rod Source

Optional Additional Shield: 0.5" (1.2 cm) lead shield, slides over integral shield for total of 1.0" of shielding – includes cover

Cover: Fits optional additional lead shield, has 0.25" (.6 cm) lead shielding

PHYSICAL DATA

Well Counter:

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

Weight: 29 lb (3.2 kg)

Approvals: ETL listed to UL 60601-1 and CAN/CSA C22.2 No. 601-1M90, IEC 60601-1, IEC 60601-1-4 and IEC 60601-1-2



086-332 Dose Calibrator, Atomlab™ 500Plus, 100-240 VAC\$9,450.00
Includes: smart display, ionization chamber, well counter, RS-232 port, vial/syringe dipper and well insert.

Related: Dose Calibrator

086-333 Software, Atomlab 500 Data Manager\$100.00

086-334 Cable, European to Wall Outlet15.00

086-336 Chamber, Dose Calibrator5,500.00

075-594 Chamber, Wipe Test2,950.00

086-337 Printer, Dot Matrix (label)495.00

086-339 Printer, Ink Jet (Report).....250.00

086-338 Shielding Rings, Interlocking, 2" lead.....2,300.00

For additional protection from high energy activity

086-243 Copper Dipper, Vial/Syringe250.00

086-423 Moly Shield, Vial, .3" lead125.00

086-435 Moly Shield, Syringe, .3" lead425.00

086-509 Lineator495.00

Replacement:

086-242 Vial/Syringe Dipper\$70.00

086-241 Well Insert.....70.00

086-278 Ribbon, Printer, 4/pkg.....18.00

086-268 Labels, "Peel & Stick", 200/roll42.00

Related: Wipe Test Counter

063-139 Rod Source. Cs-137\$275.00

075-596 Shield, Auxiliary Lead450.00

006-350 Wipe Test Kits, 500/pkg70.00



◀ Atomlab 500Plus with additional chambers and wipe test counter.

For physics tests, testimonials and warranty information, visit us on the web www.biodex.com/dosecalibrators

An industry exclusive two-year warranty is standard.

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