



# DZ-Lite 3000 Plus

*Chemiluminescence Immunoassay System (CLIA)*



*Innovations In Clinical Diagnostics*

## **ABOUT DIAZYME**

*Diazyme Laboratories, Inc. is located in Poway, California. Diazyme uses its proprietary enzyme and immunoassay technologies to develop diagnostic reagents which can be used on most automated chemistry analyzers in user-friendly formats. Diazyme is a cGMP and ISO 13485 certified medical device manufacturer. Diazyme's products include test kits for diagnosis of cardiovascular disease, liver disease, cancer markers, renal disease, diabetes and electrolytes.*

## **MISSION STATEMENT**

*Our mission is to improve the quality of healthcare by providing innovative products in clinical diagnostics.*

## **CONTACT INFORMATION**

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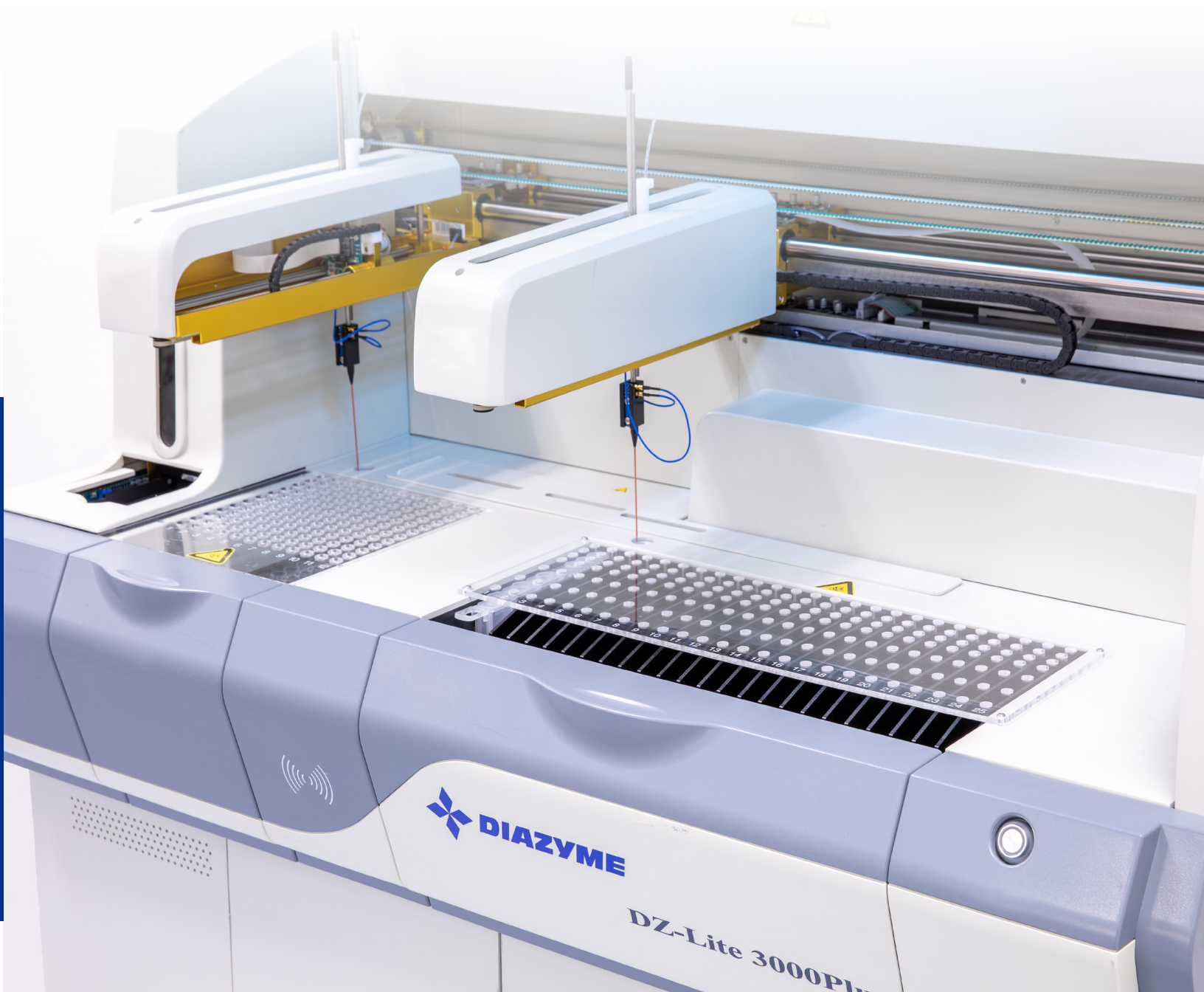
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**Integrated design**  
**Simple and smart operation**  
**Compact size and weight**



# Outstanding Technology

## Power of DZ-Lite™ 3000 Plus

### Chemiluminescence Immunoassay System (CLIA)

CLIA uses two important technologies, one is labelling technology which determines reaction mode, and the other is separation technology which determines the sensitivity, accuracy and precision of the reagents

#### Magnetic Microbeads Separation Technology

DZ-Lite 3000 Plus uses Magnetic Microbeads. As a separation technology, it has been widely used in the field of CLIA. Compared with traditional separation technologies, it has the following advantages,

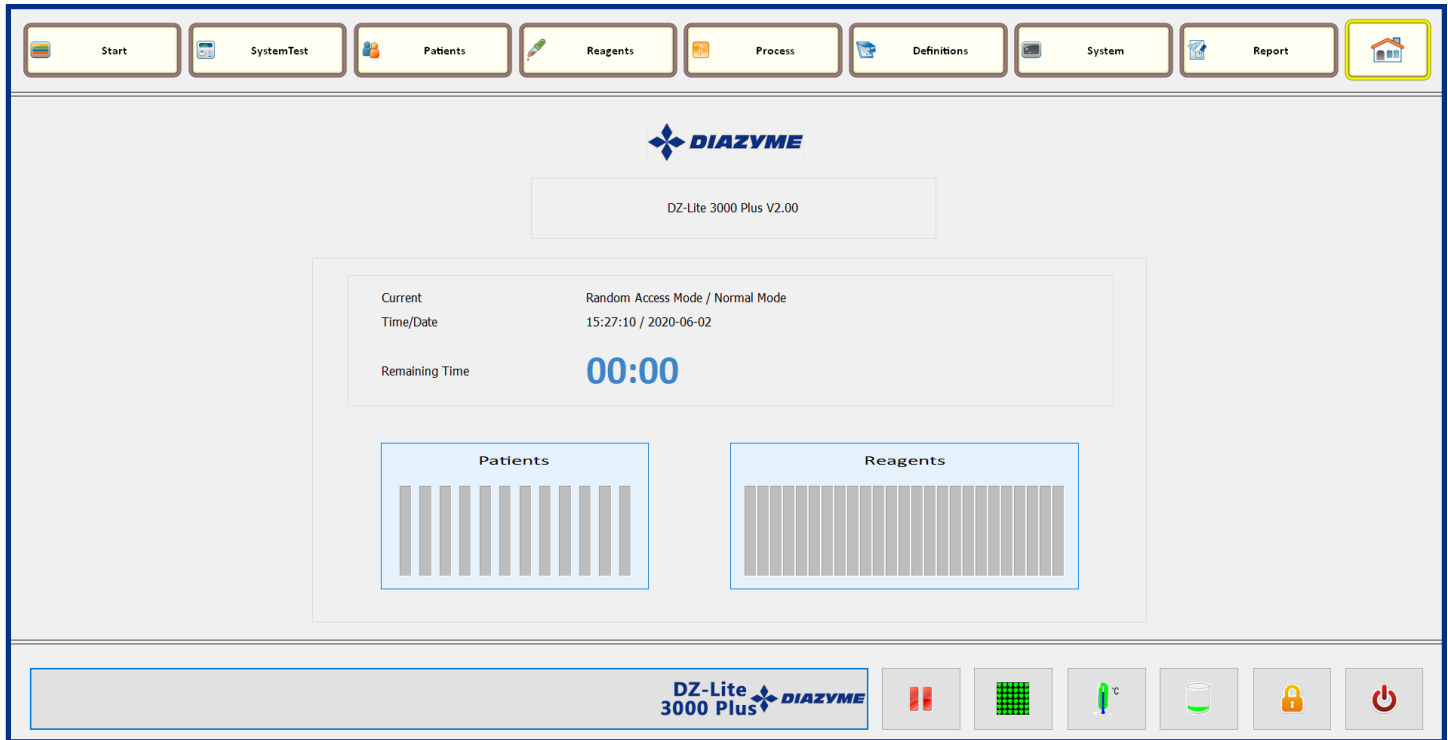
- Shortening the reaction time by enlarging the reaction area of antigens and antibodies.
- Enhancing the sensitivity by better and faster capturing of antigens and antibodies.
- Reducing inter or intra-assay discrepancies significantly by mixing the reagents thoroughly in a liquid separation platform.

#### ABEI Labelling Technology

Two types of labelling technologies are commonly used. One is enzyme label and the other is non-enzyme small molecule label. Enzyme label reagents are not so stable and are easily affected by the change of storage conditions. DZ-Lite 3000 Plus system applies ABEI labels. ABEI is a non-enzyme small molecule with special molecular formula to enhance stability in acid and alkaline solutions. The chemical reaction process of ABEI with sodium hydroxide (NaOH) and hyperoxide (H<sub>2</sub>O<sub>2</sub>) finishes in 3 seconds.



# Operation Software



## Comprehensive Software

- User-friendly interface
- Real-time status monitoring for each test
- Monitoring reagent and consumable status
- Intelligent alarm function
- Multilingual support, 10 kind of languages  
more languages available by request



## Quality Control

- Westgard rules and Levy-Jennings chart for both internal and external quality control



## Pre or Post Defined Dilution Function

- Pre- and post- dilution available for the case of high concentration sample



## Maintenance Guide

- Smart Maintenance with step by step guide, ensure performance reliability and reduce unnecessary service calls
- Daily, weekly and monthly maintenance guide for analyzer



## Test Summary Function

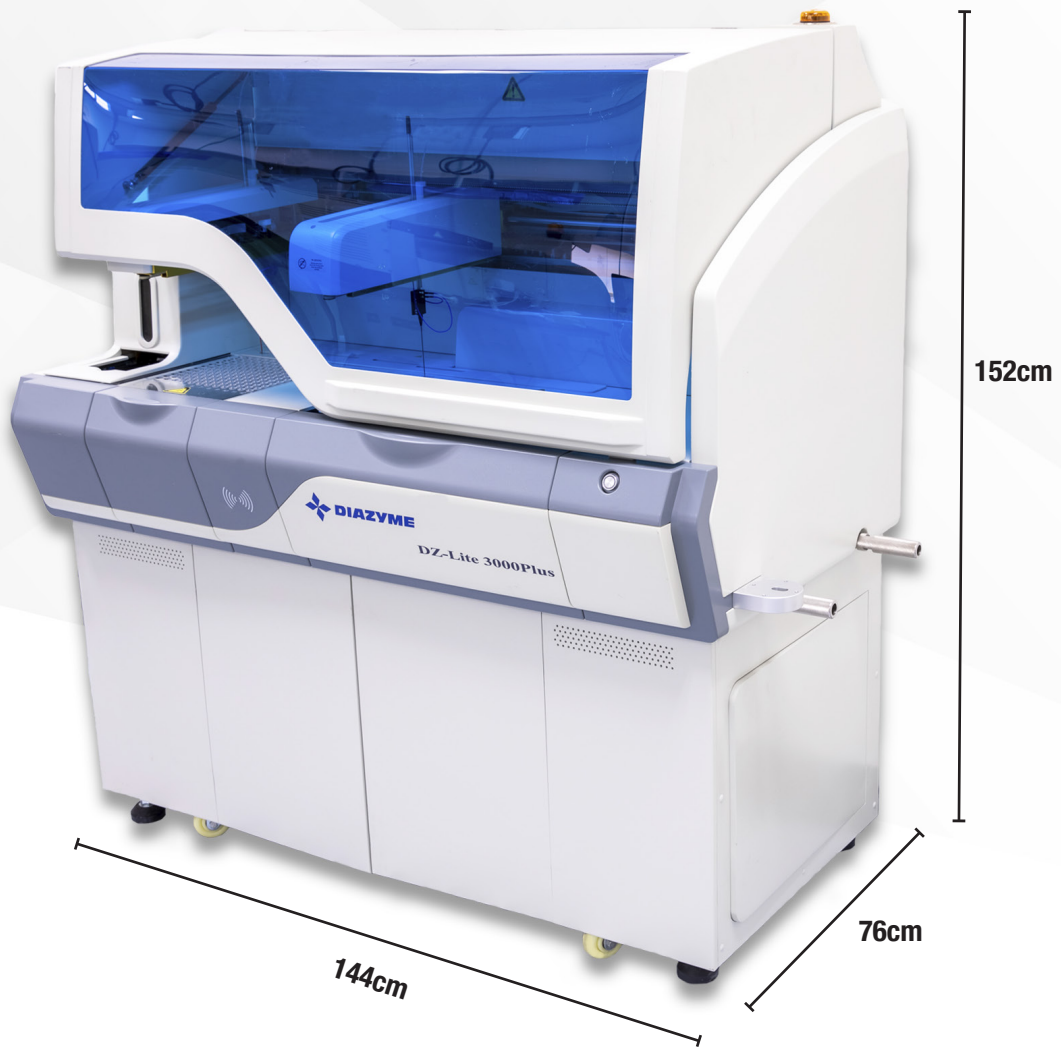
- Test summary including system test, calibration, QC, statistics of sample, valid tests and rerun tests
- Search and review test information conveniently



## Bidirectional LIS Connection

- Bidirectional LIS connection by TCP/IP and COM





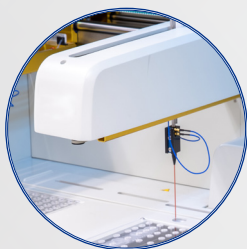
# DZ-Lite™ 3000 Plus

## Chemiluminescence Immunoassay System (CLIA)

| TECHNICAL SPECIFICATIONS |  |
|--------------------------|--|
| Reagent Features         | <ul style="list-style-type: none"> <li>• Flash chemiluminescence label – ABEI, with high sensitivity and long stability</li> <li>• Magnetic microbeads separation, fast and efficient</li> </ul>   |
| Main Features            | <ul style="list-style-type: none"> <li>• Throughput: up to 180 tests/hour</li> <li>• 24 hours ready-to-use</li> <li>• Time to first result: 17 minutes</li> </ul>  |
| Modes of Operation       | <ul style="list-style-type: none"> <li>• Random, Batch and STAT</li> </ul>   |
| Sample Loading           | <ul style="list-style-type: none"> <li>• Up to 144 sample tubes</li> <li>• Continuous loading, STAT available</li> <li>• Barcode reader recognition or analyzer automatic numbered</li> <li>• LIS connection, automatic read sample information</li> <li>• Refrigerated sample area with independent power supply</li> </ul>   |
| Reagent Loading          | <ul style="list-style-type: none"> <li>• 25 reagents on board</li> <li>• Continuous loading</li> <li>• RFID reading all info of reagent</li> <li>• Refrigerated reagent area with independent power supply</li> </ul>  |
| Reagent Integral         | <ul style="list-style-type: none"> <li>• Ready-to-use, no pretreatment required</li> <li>• Including calibrators</li> <li>• RFID tag storing all info of reagent</li> <li>• RFID tag with built-in master curve</li> <li>• 2-point calibration to adjust master curve</li> <li>• Calibration stability: Max 4 weeks</li> </ul> |
| Other Features           | <ul style="list-style-type: none"> <li>• Clot detection</li> <li>• Liquid level detection</li> <li>• Automatic and optional ratio for high sample dilution</li> <li>• Constant 36.8 ± 0.5°C incubation</li> </ul>  |
| Operation System         | <ul style="list-style-type: none"> <li>• Windows 10</li> <li>• Dell compatible (Dual-core CPU)</li> <li>• Color touch screen</li> </ul>  |
| Interconnection          | <ul style="list-style-type: none"> <li>• Bidirectional LIS connection by TCP/IP and COM</li> </ul>   |
| Dimensions Weight        | <ul style="list-style-type: none"> <li>• Input: AC 110/230 Vac. 50/60 Hz</li> <li>• Dimension and weight: 144*76*152cm 228kg</li> </ul>  |

*Note: Printer not included. Printer must be compatible with Windows 10 operating system.*

# DZ-Lite™ 3000 Plus



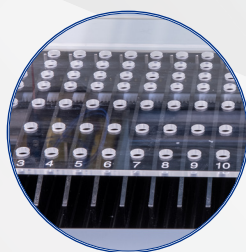
## Pipettor

- Aspirate reagent / sample with high speed
- Titanium needle with crush-proof function
- Clot detection & liquid level detection
- Coated with TEFLON to prevent carry-over
- inner & external washing



## Automated cuvette loader

- Capable of loading modules continuously
- Up to 120 reaction modules



## Sample area

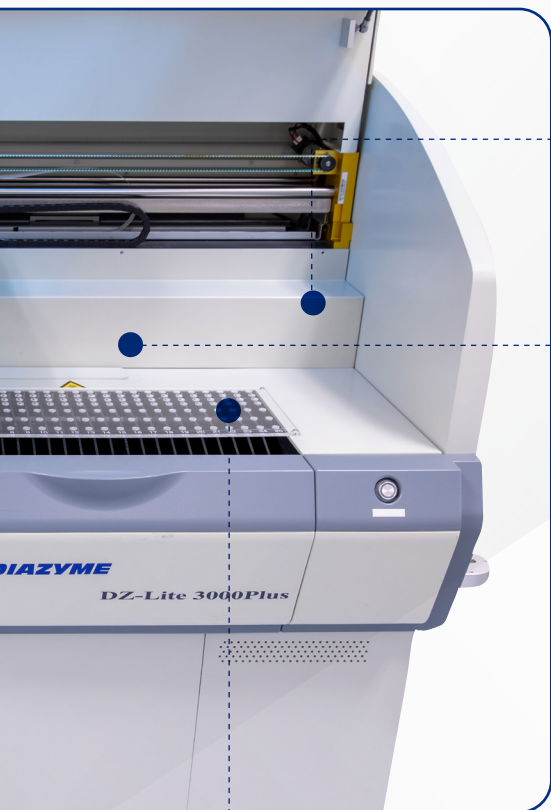
- Up to 144 samples on board with barcode
- Continuous loading & cooling function
- Random, batch, and STAT modes



## Incubator

- 16 incubate slots (96 tests at the same time)
- The temperature is  $36.8^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$





### Chamber

- High-sensitivity and low-noise PMT
- Cuvettes detection and anti-overflow



### Washer

- Strong magnetic field helps better separation
- Three pairs of washing needles with anti-overflow



### Reagent area

- Cooling function
- 25 Reagents on board, continuous loading
- RFID label storing reagent information
- RFID tag, high reliability
- Easy and fast for adding and updating







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