

# *ETI-Max3000*



DiaSorin

The Diagnostic Specialist



# DESIGNED TO SIMPLIFY AND OPTIMIZE YOUR ROUTINE

ETI-Max3000



## > 4 PLATES UP TO 7

Increased number of results with continuous loading of samples and reagents.

## > RANDOM ACCESS AND BATCH MODE

Multiple analytes on the same plate (1 up to 12) or single analyte per plate.

## > SAFETY AND RELIABILITY

Full process control to guarantee secure results.

## > EASY MAINTENANCE

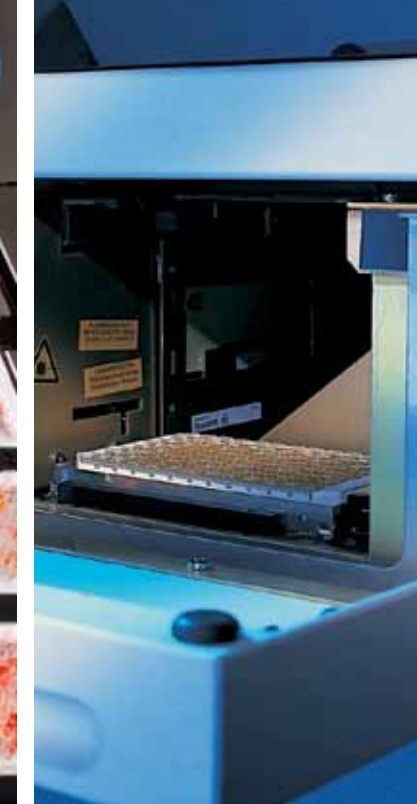
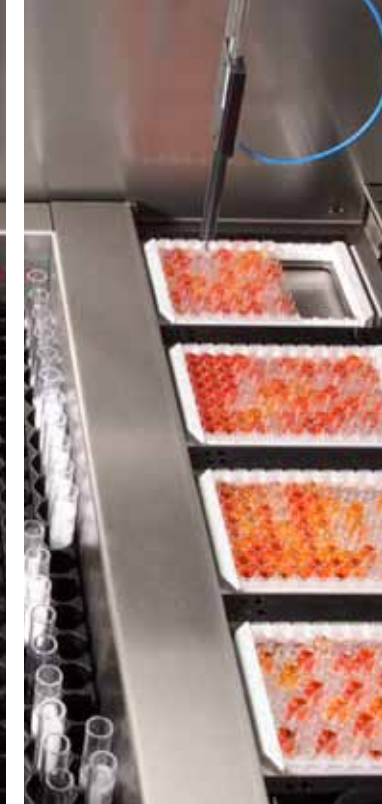
Automatic daily weekly.

## > SEROTEC FUNCTIONALITY

Samples aliquoting in tube/plate.

## > SOFTWARE FEATURES

- Maximum flexibility in protocol programming and creation of microplate maps.
- Different worklists in different cycle times.
- Schedule for optimizing loading time.
- Archive of results by plate and by individual patient.
- Bidirectional interface to a LIS in compliance with ASTM specification and ASCII file transfer.



### SAMPLE/REAGENT LOADING AREA

- Barcode reading: barcode automatically reads primary samples and reagents.
- Up to 240 primary tubes.
- Sample racks: each holds 20 samples of varying sizes (10-16 mm diameter).
- Reagent racks: optimized for DiaSorin reagents in 4 different types.
- Automatic checking of required reagent volumes.

### PREDILUTION AREA

- Removable predilution rack, with additional reagent positions.
- Up to 160 predilution tubes (20 rows of 8 tubes).
- Predilution tube positions identified by numbers.
- Serial dilutions.
- Tip requirement automatically calculated (up to 480 on board).
- 300  $\mu$  L and 1100  $\mu$  L conductive disposable tips.
- Clot detection.
- Check for sample/reagent post-dispensation.
- High-speed dispensing.
- No carryover.
- Mixing (in predilution tube and microplate).
- Sample/reagent multidispensing.
- Patient sample archiving.

### DISPENSING AREA

- Maximum precision in predilution and dispensing.
- Clot detection.
- Check for sample/reagent post-dispensation.
- High-speed dispensing.
- No carryover.
- Mixing (in predilution tube and microplate).

- Sample/reagent multidispensing.
- Patient sample archiving.

### WASHING AREA

- 8 channels of dual needles.
- Washing of different types of microplates.
- 4 different wash buffers on board.
- level sensing.

### INCUBATION AND READING AREA

- Robotic plate transfer between assay steps.
- 4 independent incubators can each be set at room temperature to 50 C°.
- Reading: absorbance and kinetics value.

## TEST PROFILES ON ETIMAX 3000 More than 150 tests available\*

- > VIRAL HEPATITS
- > TORCH
- > EBV
- > RETROVIRUSES
- > AUTOIMMUNITY
- > OTHER INFECTIOUS DISEASE

\*Not all the assays are available in all countries. Please refer to your local DiaSorin representative.

**murex**  
Murex® is a DiaSorin trademark  
*on board*

## TECHNICAL SPECIFICATION

### SAMPLE AND REAGENT DISPENSING UNIT

|                              |   |
|------------------------------|---|
| Liquid handling              | 1 syringe of 1-mL capacity                                    |
| Disposable tips              | Carbon, 300 or 1100 µL, automatically managed by the software |
| Pipetting area               | 4-plate handling  |
| Precision (Sample & Reagent) | CV < 8.0% with 10 µL<br>CV < 2.5% with 100 µL                 |
| Level sensor system          | Electronic  |
| Clot detection               | Yes   |
| Mixing                       | Yes (for predilution tube & microplate)                       |
| Multidispensing              | Yes (sample, control & reagent)                               |
| Sample dispensing time       | < 18 min/96 wells (100 µL/well)                               |
| Reagent dispensing time      | < 4 min/96 wells (100 µL/well)                                |
| Carryover                    | None  |

### SAMPLE IDENTIFICATION UNIT

|                |   |
|----------------|---|
| Identification | Barcode scanner for primary tubes, controls & reagents<br>Barcode scanner for microplate (optional)<br>Manual barcode gun (optional, connected in emulation keyboard) |
| Tubes          | 10-16 mm diameter, 55-100 mm height<br>16 mm diameter, 100 mm height  |
| Labels         | Interleaved 2 of 5, UPC A & E, IATA 2 of 5, Industrial 2 of 5, EAN 8 or 13, Code 128, EAN 128, Pharmacode, EAN Addendum 2 or 5, Code-a-bar                            |
| Capacity       | Up to 240 sample tubes  |

### INCUBATION UNIT

|                   |                                    |
|-------------------|------------------------------------|
| Capacity          | 4 independent chambers             |
| Temperature range | 5°C above room temperature to 50°C |
| Accuracy          | ± 1°C mean of plate                |
| Uniformity        | ± 0.7°C across plate               |
| Shaking           | Longitudinal                       |

### WASHING UNIT

|                         |  |
|-------------------------|--|
| Capacity                | Up to 4 wash buffers   |
| Wash head               | 1 x 8  |
| Dispensing volume       | 200-2500 µL/well, managed per assay                              |
| Precision               | ± 5% CV at 300 µL  |
| Residual volume         | < 2.5 µL in U-shaped bottom wells<br>< 4 µL in flat bottom wells |
| Buffers level sensor    | Yes  |
| Waste tank level sensor | Yes  |
| Wash cycles             | 1 to 9, managed per assay  |
| Soak time               | 1 to 999 sec, managed per assay                                  |
| Dispensing pressure     | Adjustable per assay   |

### READING UNIT

|               |  |
|---------------|--|
| Reading       | Vertical with photodiodes, absorbance or kinetics                            |
| Channels      | 8  |
| Method        | Single, double or double beam with overrange filter                          |
| Spectrum      | 400-700 nm   |
| Filters       | Up to 8 positions available, 5 already on board (405, 450, 492, 550, 620 nm) |
| Reading time  | Less than 10 sec   |
| Dynamic range | - 0.100 to 3.000 absorbance units  |
| Linearity     | 0-2.000 absorbance units ± 1.0%  |
| Accuracy      | ± 0.005 absorbance units or 2.5%   |

### MANAGEMENT SYSTEM

|           |                                     |
|-----------|-------------------------------------|
| Computer  | Pentium III, 500 MHz, 64 Mbytes RAM |
| Hard disk | 6.4 GBytes                          |
| Keyboard  | Alphanumeric                        |
| Mouse     | Standard                            |
| Monitor   | 19" colour                          |
| Printer   | Laser                               |

### SOFTWARE FEATURES

|                           |   |
|---------------------------|---|
| Operating system          | Window XP, Windows 2000 or 95<br>32-bit application   |
| Language                  | Multilanguage   |
| Plate capacity            | 4 up to 7, in continuous loading  |
| Multiple assays per plate | Yes, up to 12 assays  |
| Data reduction            | Cut-off (qualitative)<br>Interpolation method (quantitative):<br>4 parameters, point-to-point, linear regression, cubic, spline, etc. |
| QA analysis               | Mean, SD, CV, Levey-Jennings  |
| Protocols storage         | Related to HD capacity  |
| Result printout           | Definable per assay and per patient   |
| Patient archive           | Yes   |
| Plate loading             | Per plate, managed with time scheduling   |
| Process in control        | Yes (on-line log event/error file)  |
| I/O Interface             | ASTM and Flexible ASCII.  |
| Patient sample archiving  | Yes, plate and tube   |

### DIMENSIONS

|        |   |
|--------|---|
| Width  | 1130 mm   |
| Depth  | 760 mm (880 mm including the pipette waste bag) |
| Height | 1000 mm   |
| Weight | 130 kg  |

### ELECTRICAL REQUIREMENTS

|                      |                                      |
|----------------------|--------------------------------------|
| Universal a.c. input | 100 - 240V / 3.2 - 1.3° / 50 - 60 Hz |
| Power                | Typically 500 VA max                 |

### SAFETY REQUIREMENTS

CE marked; compliant with the directive of in vitro diagnostic medical devices 98/79/EC