### diatron••



# INTELLIGENT WALK AWAY CHEMISTRY

The Diatron P500 is an ergonomically designed, fully automated, random access, bench top, clinical chemistry system. As a result of its innovative design and advanced Windows-based software, the P500 can achieve a total throughput of up to 480 tests/hour (in a mix Routine + ISE). The P500 incorporates features usually offered only in higher cost systems.

Uninterrupted workflow, enhanced walk-away operation and remote access diagnostics, are positioning the P500 as a market leading system.

#### COST EFFECTIVE

Long on-board reagent stability with extensive linearities, low and high volume reagent kits, multi calibrators and controls

#### **ONE FAMILY**

The P500 belongs to State Of The Arts family of clinical chemistry systems. Within the family the instruments share common, barcoded reagents menu<sup>\*</sup>, consumables, controls and calibrators. All fully validated.

#### PRODUCTIVITY

Continuous sample and reagent loading with on board capacity of 95 samples (5 racks x 19 position) and up to 72 reagent vials + ISE

#### RELIABILITY & TRUST

Diatron manufactures high performance analysers with best available quality components

\*not cleared for US use

## SPECIFICATIONS

#### **THROUGHPUT\***

- Up to 340 photometric tests/hour mono reagent
- Up to 180-240 ISE tests/hour with optional ISE unit
- Maximum combined throughput up to 480 tests/hour

#### **ANALYSIS MODES**

- Full and optimized Random access
- Sample or batch mode
- Real STAT
- Continuous reagents and samples loading

#### **TEST PROFILES DEFINITION**

- Automatic sample pre and post dilution (1:2 to 1:120)
- Automatic sample re-run
- Reflex testing

#### METHOD TYPES

- Ipoint end point
- 2point end point
- Fixed time
- Kinetics
- Calculated
- With or w/o sample and reagent blank

#### CALIBRATION

- Automatic calibration
- Automatic curve fit
- Factor or standard
- Single and multipoint (unlimited)

#### CALIBRATION FORMULAS

- Linear
- Multilinear
- Polynomial
- Sigmoid
- Logit4
- Logit5
- Spline

#### PIPETTING ARM

- One pipetting arm for both sample and reagent, reaction pre-heater, probe collision sensor, reaction mixer and clot detector
- Probe cleaning internal and external washing
- Stirring after each dispensing, programmable time
- 8 steps washing station

#### **REACTION TRAY**

- Reaction cuvette: 80 re-usable plastic 6 mm light path
- Reaction time: 0 to 25 min
- Reaction temperature: adjustable, default 37°C ± 0.1°C

#### **OPTICS:**

- Light source: Precision UV quartz halogen lamp
- Photometric Range: -0.1 to 3.6 A
- MEASURING WAVELENGTH
- 340, 380, 405, 450, 490, 505, 550, 590, 620, 650, 700, 750 nm

#### PHOTOMETRY

Single or Double-wavelength simultaneous reading

#### **OPTIONAL ISE UNIT**

- Medica ISE module: Na+, K+, CI- and optional Li+ measurements
- Samples: serum, plasma or urine

#### DATA MANAGEMENT

- Import/export database
- Automatic backup procedure
- Windows-based software

#### **INTERFACE LIS:**

 Bi-directional RC 232 C, ASTM E 1381-95, ASTM E 1394-97

\*The throughput is measured by the time elapsed between receiving the first and the last result. It will vary depending on the ratio of 1 and 2 steps assays as well as number of ISE tests. The ISE throughput depends on number of channels/electrodes used in the module.

## SPECIFICATIONS

#### SAMPLES

- Sample volume 2 to 200 µl/test (in increments of 1 ul)
- Sample tray of 95 positions (5 racks x 19 positions)
- Applicable sample tubes:
- primary tube length up to 100 mm
- pediatric vials

• 2 types of adaptors to accommodate variety of sample tubes and cups (ext. diameter 11.5 -16mm)

#### REAGENTS

- Reagent cooling compartment of 72 cooled positions 8+/- 2°C
- I to 3 reagents, 5 to 480 µL in one step (in increments of I µL)
- Reagent bottle size 25mL, 45mL and 70 mL
- Min. reaction volume 180 μL
- Max. reaction volume 650 μL

#### **BARCODE READER**

On-board samples and reagents barcode recognition

#### QUALITY CONTROL SYSTEM

Levy-Jennings and Twin QC, Westgard multi-rules

#### PRINTOUT

 Customizable (Analysis result, work list, list of samples, Quality Control, Calibration curves, etc.)

#### WATER CONSUMPTION\*\*

• ~1,5 L / hour

#### ENVIRONMENTAL CONDITIONS

- Transportation and storage:
- +5 to +35°C
- Humidity 10 to 80% noncondensing,
- Pressure 600 to 1050 hPa
- Operation:
- +18 to +30°C
- Humidity 40 to 80% noncondensing
- Pressure 600 to 1050 hPa

#### **DIMENSIONS:**

• 880mm(W) x 700mm(D) x 660mm

### Weight ~95 Kg POWER REQUIREMENTS:

• 110/220V, 50/60 Hz, 600 VA

\*\*Water consumption: up to 2L / h depending on the number of extra programmed washes and number of batch runs

Analyzer and ISE module						
SAP No	Description	Catalogue No	SAP No	Cat. No.	Product Name	Pack size
10025007	P500 Clinical chemistry analyzer	P500-1	10030697	VA0002SL	Additive for wash solution	2x250 
			10025810	VA0003SL	Calibration Set	4x50 ml
10025008	P500 Clinical chemistry analyzer with ISE module	P500-2	10030695	VA0000SL	Cleaning solution KIT	2x250 ml
			10310073	VA0008CCL	Cuvette Cleaner Solutions	2x100 ml

### diatron

#### We are a member of the STRATEC Group | www.diatron.com | sales@diatron.com

The herein provided information and specifications by DIATRON are provided on an "as-is" basis and may be subject to changes, omissions and errors. DIATRON shall have no liability for the accuracy and completeness of these information and specifications and cannot be held liable for any representations or warranties, expressed or implied, and any third party claims or losses of any damages thereof. DIATRON reserves the right to make any changes to the information and specifications at any time and without notice. The applications and products herein may not be available in all markets 1 Nr. P500211105V8

