

Diatron

Your Experts in Hematology
and Clinical Chemistry

25 years experience
High-tech facility manufacturing
Worldwide distribution
Over 5000 Chemistry units installed
ISO certified European manufacturer

P500

Intelligent Walk
Away Chemistry



Exclusively Marketed by



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Quality Without Compromise

Diatron Clinical Chemistry



P500

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 per hour. The P500 offers features usually only offered by higher cost systems such as uninterrupted workflow, enhanced walk-away operation and remote access diagnostics. By using high quality components of proven technology and state of the art electronics combined with fully validated reagents the system is a perfect combination to ensure the best quality results. The combination of analyzer and our wide range of high performance clinical chemistry reagents, controls and calibrators make the Diatron P500 a market leading system.



Multi functional arm



Efficient Washing System



Continuous Reagent Loading



Continuous Sample Loading

Samples Handling	
Serum, plasma, urine, CSF and other sample types can be used	+
Primary, secondary tubes and micro-cups for pediatric samples	+
Sample Racks/Positions per rack	5 / 19
Samples on-board capacity	95
Continuous loading of sample racks	+
Real STAT function	+
Automatic sample dilution and concentration	+
Post-analytical tasks such as re-running and post-dilution	+
Editable A4 complete patient report	+
Unlimited/searchable patient records	+
Reagent Tray & Handling	
Removable & interchangeable reagent tray	+
Refrigerated reagent tray	7 - 9 °C
Refrigerated on-board single reagents/tests	72
Up to three different reagents per test	+
Continuously monitored loading/access of reagents	+
Multiple reagent bottles of the same assay/test can be on-board (different lots & pre-calibrated)	+
On-screen early warning features (calibration and blank expiration, limitation, usage etc)	+
On-screen inventory management with real time tracking of on-board reagent availability	+
Features	
Capacitive level sensing for samples and reagent	+
Crash and collision detection	+
Reagent Pre-heater	+
Clot detection	+
Programmable variable intensity on probe mixer	+
System wash and waste solutions monitoring	+
Electronic log of activities	+
Traceability of results	+
Bi-directional LIS with continuous results transmission	+
Remote diagnostics to limit on-site visits	+
QC, graphical and statistical; Westgard rules indicated, Levey-Jennings plots, twin QC and box whisker plots	+
Programmable auto QC and calibrations	+
Reflex testing	+
Method development options	+
Multiple methodology options (End-Points, Fixed Point, Kinetics, etc)	+
Wide range of calibration options (Linear, Multi-, Sigmoidal & Spline, etc)	+
Automatic back-up procedure	+
Services needs automatically tracked	+
Sophisticated software features for daily use and training	+
Compatible with most commercially available printers	+

Technical Specifications	
Electrical requirements	600 VA
Weight (kg/lbs)	98/216
Dimensions (Width x Depth x Height) (cm)	90 x 66 x 62
Water Consumption (Litre/hour)	1.5
Computer/SW environment	up to Win8
Interferential optical filters (340-750nm)	12
Photometric range (linearity)	-0.1 / 3.6
Optical resolution	0.0001
Optional direct 4-ISE module	+
Internal Barcode Reader for samples, sectors and reagents	+
Environmental requirements	18 - 30°C
Relative Humidity	10 - 85 %
Halogen Tungsten lamp life with sleep mode (h)	2000
Sample and reagent precision of syringe at full stroke	0.05 %CV
General Characteristics	
Small to mid-size laboratories	+
Discrete random access analyzer (fully automated)	+
Throughput (tests/hour)	300
Typical throughput (tests/hour)	275
Throughput with ISE (tests/hour)	480
Temp. controlled cuvette tray via air bath (min maintenance)	37 ± 0.1°C
Reaction volume (µL)	180 - 650
Sample volume (µL)	2 - 100
Cuvette Path (mm)	6
PMMA reusable/single use cuvettes on board (in segments of five)	80
Probes/Pipettes	1
Time to first result (seconds)	45
Extensive test menu	+

Diatron Clinical Chemistry Reagents

In combination with the analyzer there are **over 70 CE-IVD marked tests** in the Diatron product portfolio to offer a comprehensive range of **validated high quality** Clinical Chemistry reagents, calibrators and controls which meet the needs of today's growing laboratories. The new tests include **substrates, enzymes, electrolytes, lipids, specific proteins and special tests**. All reagents have been **specially designed with the Diatron automated analyzers** in mind, so the combination of analyzer and reagents allows customers to enjoy features and benefits that are only normally possible on high cost Clinical Chemistry systems.



Description	Catalogue Ref
P500 Analyzer without ISE	P500-1
P500 Analyzer with direct 4-ISE module	P500-2
Pictus ISE module (module for upgrading Pictus and P models)	5008

Description provided herein are for marketing purposes only and may not be representative of descriptions provided on official Diatron packing lists and invoices

+ Efficiency

- 95 sample positions
- 72 single reagent positions
- First results within 45 seconds
- 5 open channels
- Internal optional 4-module ISE
- Optimized walk away operation (auto cal & blank accept)

+ Cost effective

- Low water consumption (~2 L/h)
- Minimal consumable usage
- 80 reusable PMMA reaction cuvettes
- Extended calibration and long on-board stability
- High throughput for a small footprint
- Environmentally friendly

+ Easy to operate and learn

- Runs on any Windows platform up to Windows 8
- Standard Windows messages & calls
- Flexibility for reagents application
- Sophisticated features for use and training
- Intuitive post dilution & result checking
- Graphically represented menus – easy to use icons

+ Reliable High Quality Operation

- ISE, dilutor, pumps from suppliers of proven technology
- Dust-free photometer with minimal service needs
- Multiple functional arm with crash detector
- Capacitative level sensor
- Pre-heater / Temperature control
- Unique design variable intensity mixer
- Clot detector
- Internal BCR for samples and reagents

+ Optimized Workflow

- Autocal and auto QC features
- Bi-directional LIMS
- Reflex Testing
- Pre - & post-dilution
- Continuous reagent & sample loading

+ On-board Inventory Control

- Scale monitor wash and waste system with alarms
- Real time reagent inventory control
- Continuous monitoring of sample progress
- Real stat sample capacity

+ Remote Access & Diagnostics

- Remote diagnostics to limit on-site visits
- Remote access of analyzer through a web based connection
- Remote firmware updates