



# ANALYZER OVERVIEW

Diatron's P700 is a fully automated, random access, small footprint, floor standing chemistry analyzer. Innovatively designed with 2 reaction trays and robotic arms, the system can achieve a total throughput of up to 720 tests/hour. The

P700 belongs to State Of The Arts family of clinical chemistry systems. Within the family the instruments share common, barcoded reagents menu, consumables, controls and calibrators. All fully validated.









#### **REAGENT TRAY**

- 72 position removable reagent tray
- Onboard refrigerator
- Barcoded reagents

#### WASH SYSTEM

- 6 steps optimized washing system
- Automatic cuvette check prior to use
- Reusable cuvettes for low operating cost

#### **SAMPLE TRAY**

- 95 (5 x 19) position barcoded sample racks
- New design to accommodate a variety of primary tubes and cups
- Uninterrupted workflow

#### MULTIFUNCTIONAL PROBES

- Clot, crash and liquid detection on both probes
- Pre-heated probe for faster test times
- Variable intensity mixer

## DIATRON CLINICAL CHEMISTRY REAGENTS

In combination with the analyzer we have over 50 CE-IVD marked tests to offer a comprehensive range of validated high quality Clinical Chemistry

reagents, calibrators and controls. Our tests include substrates, enzymes, electrolytes, lipids, specific proteins and special tests.

# SPECIFICATION

#### **THROUGHPUT\*:**

- Up to 600 photometric tests/hour mono reagent
- Up to 180-240 ISE tests/hour with optional ISE unit
- Maximum combined throughput up to 720tests/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.d **CALIBRATION:**
- Automatic calibration. Automatic curve fit. Factor
- or standard. Single and multipoint (unlimited) Calibration formulas: linear, multilinear, polynomial,
- sigmoidea, Logit4, Logit5, spline

#### QUALITY CONTROL SYSTEM:

- Levy-Jennings and Twin QC, Westgard multi-rules SAMPLES:
- Sample volume: 2 to 200 µL/test (in increments of I ul)
- Sample Tray: 95 (5 racks x 19 positions)
- Primary tube (length up to 100 mm)
- Paediatric vials
- 2 types of adaptors to accommodate variety of sample tubes and cups (ext. diameter 11.5-16mm) **PRINTOUT:**
- Customer optimized (Analysis result, work list, list of samples, Quality Control, Calibration curves, etc.) WATER CONSUMPTION\*\*:
- Typically ~5 L / hour
- **POWER REQUIREMENTS:**
- I 10/220V, 50/60 Hz, I.4 kVA **REACTION TRAY:**
- Reaction cuvette: re-usable plastic 6 mm light path
- Reaction time: 0 to 25 min
- Reaction temperature: adjustable, default 37°C ± 0.1°C
- Stirring: After dispensing each reagent
- 6 steps washing station

#### **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

#### **REAGENTS:**

- Reagent cooling compartment: 72 cooled positions 8+/- 2°C
- I to 3 reagents, 5 to 480 µL in one step (in increments of  $I \mu L$ )
- Min. reaction volume 180ul
- Max. reaction volume 650ul
- Reagent bottles size: 20, 40 and 70 mL
- BCR:
  - On-board samples and reagents barcode recognition

#### **PIPETTING ARMS:**

- Two pipetting arms for both sample and reagent, reaction pre-heater, probe collision sensor
- reaction mixer and clot detector
- Probe cleaning: Internal and external washing **OPTIONAL ISE UNIT:**
- Medica ISE module: Na+, K+, CI- and optional Li+ measurements

#### DATA MANAGEMENT:

- Import/export database
- Automatic backup procedure
- Windows TM based Software
- **INTERFACE LIS:**
- Bi-directional RC 232 C.ASTM E 1381-95.ASTM E 1394-97

#### ENVIRONMENTAL CONDITIONS

- Transportation and storage: -10 to 40 °C, humidity 30 to 90% noncondensing, pressure 600 to 1050 hPa
- Use: 15 to 30 °C, humidity 40 to 80% noncondensing, pressure 600 to 1050 hPa

#### **DIMENSIONS:**

97(w) x 67(D) x 100 (H) cm

#### WEIGHT:

~175 Kg

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

\*Water consumption: up to 6L/h depending on the number of extra programmed washes and number of batch runs

## **BENEFITS AND KEY FEATURES**

#### **EFFICIENCY**

- 95 sample positions
- 72 single reagent positions
- First results within 45 seconds
- Internal optional 4 channel ISE
- Optimized walk away operation

#### COST EFFECTIVE AND OPTIMIZED WORKFLOW

- Low water consumption (less than 5 l/h)
- Minimal consumable usage
- Real time reagent inventory control
- Real stat sample capacity

#### EASY TO OPERATE AND LEARN

- Windows based operation system
- · Flexibility for reagents application
- Sophisticated features for use and training
- Intuitive post dilution and result checking
- Graphically represented menus easy to use icons
- Autocal and auto QC features

#### **RELIABLE HIGH QUALITY OPERATION**

- ISE, dilutor, pumps from suppliers of proven technology
- Capacitative level sensor
- Clot detector
- Internal BCR for racks, samples and reagents

Analyzer and ISE module			Liquid Consumables			
Description	Catalogue No	SAP No	SAP No	Cat. No.	Product Name	Pack size
Pictus 700 Clinical chemistry analyzer	P700-1	10025301	10030697	VA0002SL	Additive for wash solution	2x250 ml
			10025810	VA0003SL	Calibration Set	4x50 ml
Pictus 700 Clinical chemistry analyzer with ISE module	P700-3	10025302	10030695	VA0000SL	Cleaning solution	2x250 ml

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