

Technical Specifications

Throughput

Up to 200 Tests / Hour

Sample Handling

Sample rotor capacity	40 sample
Barcode Reader	Yes
Number of sample with Barcode	40 samples
Size of Primary Tubes	Diameter 12mm to 16mm (Max height 100mm)
Sample Types	Serum, Plasma, Urine, Whole Blood (Hemolysis), Cerebrospinal liquid, and Biological fluid
Dispensing mode	High Accuracy ceramic syringe
Pipetting volume	2-50µL
Pipetting resolution	0.1µL
Automatic sample dilution	Yes
Tip Wash	Inside and Outside

Reagents Handling

Volume of reagents bottles	20ml and 30ml
Reagent rotor capacity	40 bottles
Cooled reagents	Yes
Temperature range of refrigerator	From 4°C to 12°C, 24 hours water cooling
Barcode reader	Yes
Reagent volume R1	150µL to 450µL
Reagent volume R2	10µL to 300µL
Dispensing mode	High accuracy ceramic syringe
Pipetting resolution	1µL
Tip wash	Inside and Outside

Reactions rotor

Reaction volume range	From 150µL to 500µL
Number of wells	50
Well material	UV special plastic cuvettes
Type of incubation	Metal thermostat
Temperature	37°C
Temperature Accuracy	± 0.2°C
Number of Mixers	1
Cuvette washing system	6 step auto wash station.

Optical System

Light Source	Halogen Tungsten lamp,12V 20W
Wavelengths	340- 405-450-510-546-578-630-670nm
Photometric range	0 -3.0 Abs
Internal resolution	0.0001 Abs
Measurement accuracy	0.5A < ± 0.02Abs, 1.0A <± 0.04 Abs
CV	<1.5%

Calibration & QC

Calibration Mode	Single point linear, Two point linear, Multi point linear, Logit-4P, Logit-50, Spline, Exponential, Polynomial
Calibration curve	Calibration curve auto check, Auto curve fitting
QC Rule	Westgard multi-rule, Cumulative sum check, Twin plot

Size & Weight

Size (w,d,h)	720 x 450 x 550 mm
Weight	50 Kg

Electrical and Environmental Requirements

Mains voltage	100 to 240 V
Mains frequency	50/60 Hz ± 1 Hz
Electric power	350 VA
Ambient temperature	10°C to 30°C
Relative Humidity	30% -85% , non condensing

Fluidic requirements

Water inlet	External tank
Water type	Purified water type II
Water consumption	<5L / Hour
Bottle of high concentration waste	20L cane
Bottle of wash solution	1L

Minimum Computer Requirements

Operating system	Windows10
CPU	2.5GHz
RAM	4GB or higher
Hard Disk	500 GB or higher
Monitor	19 inch wide screen monitor
Connector of serial channel (port)	RS -232C

Laboratory Information Systems

Connectivity to LIS	Yes.
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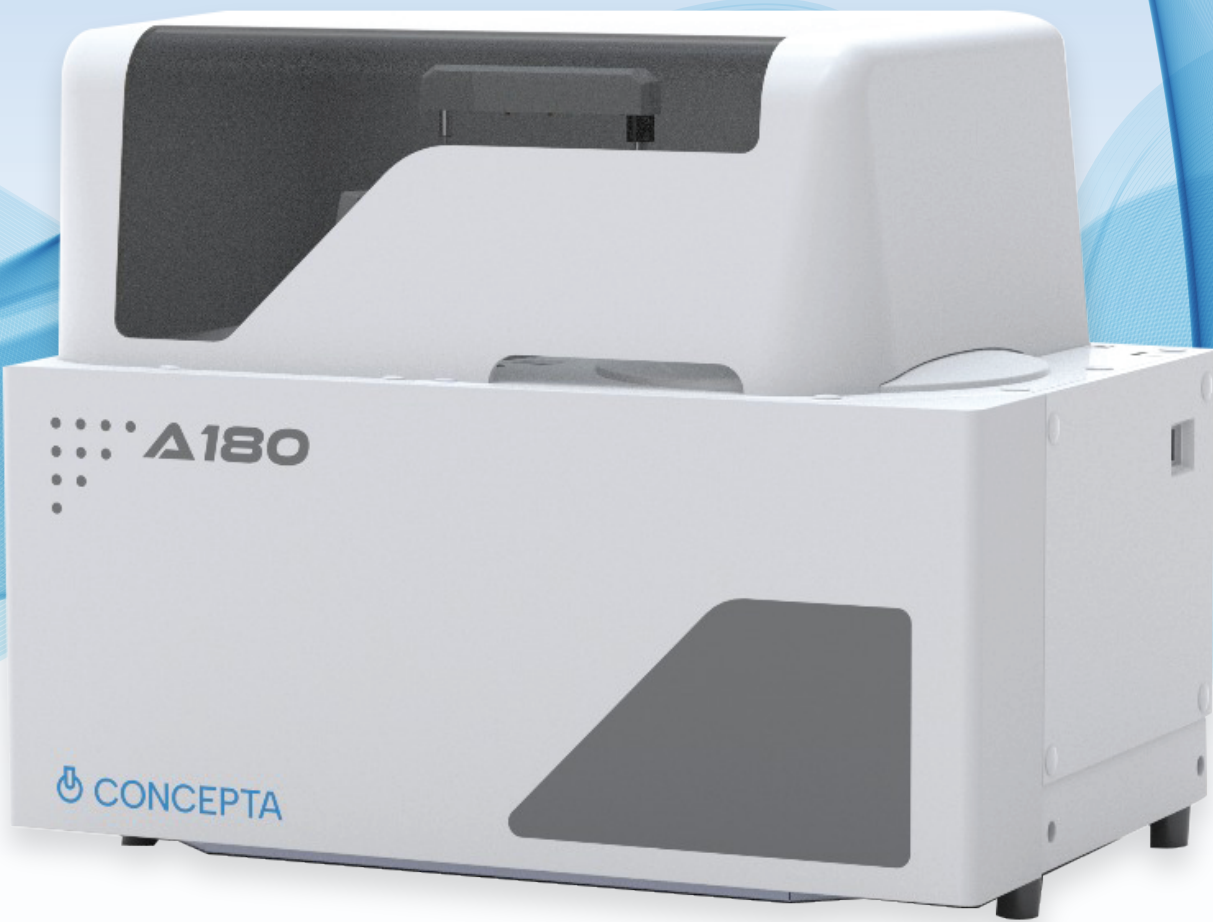
Directives and Standards Compliance

EC Directive -IVD	98/79/EC
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A180

Clinical Chemistry Analyzer

CONCEPTA



BioSystems Diagnostics Private Limited

A4, Sipcot Industrial Park | Irungattukottai | TN-602105

Ph: 044- 6712 1911 / 12 / 13 / 14 | Email: support@biosystems.in | www.biosystems.in

BioSystems
DIAGNOSTICS

A180 Clinical Chemistry Analyzer

Reaction Tray

- 50 reaction cuvettes
- Stable reaction temperature of 37°C
- Automatic water blanking for consistent quality results

Reagents and Sample Module

- Onboard refrigeration at 4-12 °C
- A quiet water-cooling system design
- 40 Reagents positions with Barcode
- 40 Sample positions with STAT facility

Sampling Module

- Polished Stainless steel probe
- Durable ceramic syringe ensures accuracy
- Built-in Degasser for accurate sampling
- Liquid level detection, vertical and horizontal collision protection
- Maintenance free rotor with stable movement

Flexible operating software

- Easy to operate with an icon-based interface
- User defined printable report template
- Automatically diagnoses issues and prompt to initiate recovery processes



Calibration and Quality Control

- Sophisticated algorithm to achieve optimal calibration curve
- Multiple QC Program : Westgard, Twin plot and Cumulative sum check

Continuous real-time tracking

- Live reaction curve monitoring
- Reagent, sample and cuvette status
- Real time water level monitoring
- Temperature status of reaction tray and reagents module

Superior wash system

- 6 step cuvette washing system
- Stainless steel polished mixer
- Automatic wash procedure of probe and mixer after each step
- Smart contamination prevention program

Optical System

- Tungsten Halogen Lamp with 2000 working hours
- A quiet water-cooling system design

