

AU680 CLINICAL CHEMISTRY SYSTEM



INSTRUMENT SPECIFICATIONS

Designed for flexibility in the lab

The AU680 is designed for mid- to large-sized laboratories and hospitals to meet ever-increasing pressures on time and productivity. Flexibility of design offers standalone operation or connectivity to lab automation systems. With throughput of up to 800 photometric tests per hour (up to 1,200 with ISEs) and 63 onboard parameters, the AU680 delivers field-proven reliability and efficiency to laboratories around the world.

- > Intuitive graphical user interface includes:
 - Sample tracking
 - Patient statistics
 - User-customized menu
 - Color alerts to highlight system operating conditions
- > AU-proven reliability for greater uptime with quick and easy parts replacement
 - No tools required
 - No more than three steps, no longer than 60 seconds for parts such as sample and reagent probes, mixers and syringes
 - Online maintenance videos
- > Integration of pre-analytical automation and immunoassay is attainable with AU680 Direct Track Sampling to Power Processor and connectivity to UniCel DxI 600/800 systems
- > Command Central integrated with REMISOL Advance* enables remote monitoring and access of instruments and automation consoles from a single workstation, optimizing laboratory management and improving decision making
- > Cooled STAT compartment provides one-button STAT interrupt and advanced Auto QC and calibration capabilities
- > High-precision microsampling
- > Priority sample repeat/reflex
- > Economical ISEs with long onboard stability; easy to maintain (only individual electrode replacement required)
- > 150-sample continuous rack loader
- > Whole blood sampling capability for HbA1c testing



AU680 Clinical Chemistry System

MAIN SPECIFICATIONS

Analytical system

Fully automated, random-access clinical chemistry system with STAT capability

Analytical principles

Spectrophotometry and potentiometry

Assay types

Endpoint, rate, fixed point and indirect ISE

Analytical methods

Colorimetry, turbidimetry, latex agglutination, homogeneous EIA, indirect ISE

Test menu applications: 125

Programmable Tests: 120

Photometrics: 113

Serum Indices (LIH) HbA1c (Thb, HbA1c + HbA1c%) and ISE

Onboard parameters

60 photometric tests + 3 ISEs (Na, K, Cl)

Throughput

800 photometric tests per hour, up to 1200 with ISE[†] ISE sample throughput: 200 per hour[†] ISE maximum tests/hr: 600 if ISE only[†]

Sample types

Serum, plasma, urine, whole blood (HbA1c) and other fluids

Sampler capacity

Rack sampler: 10 samples per rack (bar codes on primary tubes and on racks)

Capacity of 150 samples[†]

Refrigerated STAT carousel (22 samples can be run simultaneously: Cal, QC and routine samples)

Sample tubes

Primary and secondary tubes, diameter between 11.5 and 16 mm, height between 55 and 102 mm Nested micro cups

Sample volume

1.6-25 µL in 0.1 µL increments (1-25 µL for urine and repeats)

Sample quality analysis

Lipemia, Hemolysis, Icterus Indices

Clot detection and probe crash protection

Sample bar code formats

NW7, CODE 39, CODE 128, ISBT-128, 2 of 5 standard, 2 of 5 interleaved

Mixed readable (max. four types at the same time, except if using ISBT-128)

Reagent supply

60 positions for R1, 48 positions for R2 (refrigerated 4°C-12°C)

Bottle sizes: 15 mL, 30 mL, 60 mL, 120 mL

Reagent volume

R1: 15-250 µL, R2: 15-250 µL (1 µL increments)

Total reaction volume

120-425 µL**

Reaction cuvette

Permanent glass cuvettes

Reaction time

Up to eight minutes, 33 seconds

Reaction temperature

37°C

Reaction method

Dry bath

Photometric range

0-3.0 OD

Wavelength

13 different wavelengths between 340 and 800 nm

Calibration

Auto calibration, advanced calibration, cooled calibrator positions

Master calibration established by 2D bar code

200 calibrators can be programmed

History of graphical calibration data stored

Quality control

Westgard rules, Twin Plot and Levey Jennings graphs,

auto QC, cooled QC positions

100 controls can be programmed, 10 levels per test

Reflex testing

User-defined

Automated sample pre-dilution

Repeat run with increased or decreased sample volume or sample pre-dilution (3, 5, 10, 15, 20, 25, 50, 75, to 100 times)

Online

Uni- and bi-directional host query communications

Operating system

Windows XP[‡]

Data storage

Up to 100,000 patient samples

Reaction monitor 200,000 tests

INSTALLATION REQUIREMENTS

Dimensions (W x H x D) in and weight lbs (kg)

Analyzer: 49 x 50 x 37 in (1250 x 1280 x 930 mm) 1,014 lbs (460 kg)

Sampler: 26 x 37 x 41 in (670 x 940 x 1040 mm) 287 lbs (130 kg)

Power supply

200V, 208V, 220V, 230V, 240V, 50 Hz, 60 Hz, 3.8 kVA

Water supply information

Mean water consumption: 28 L/hour

Water type: deionized CAP Type II, Bacteria free

Continuous flow supply

Resistivity: less than 2.0 µS/cm filtered with a 0.5 µm filter

Temperature and humidity

18 to 32°C, 20% to 80% RH (no condensation)

Drain requirements

Built-in waste pump

Drain required: maximum height from floor <1.5 m (<59 in)

* REMISOL Advance is a trademark of Normand-Info SAS.

** Except in Japan

† Throughput is dependent on the Laboratory Automation system when the AU680 is connected to a Laboratory Automation System.

‡ Windows is a registered trademark of Microsoft Corporation.