Designed for Flexibility in your lab

AU680 Clinical Chemistry System

Blood Banking
Centrifugation
Chemistry
Flow Cytometry
Hematology
Hemostasis
Immunoassay
Information Systems
Lab Automation
Molecular Diagnostics
Rapid Diagnostics

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 random access throughput of up to 800 photometric tests per hour (up to 1200 with electrolytes) and 63 on-board parameters, the AU680 delivers field-proven reliability and efficiency to laboratories around the world.

- New and intuitive graphical user interface includes:
  - Sample tracking
  - Metering data
  - Patient statistics
  - User customized menu
  - Color alerts to highlight system operating conditions
- AU proven reliability with quick and easy maintenance procedures
  - No tools required
  - Daily hands-on time only 5 minutes
  - Online maintenance videos
- Cooled STAT module provides one button STAT interrupt and advanced Auto QC and calibration capabilities
- High-precision micro sampling
- Priority sample repeat/reflex
- Economical ISEs with long onboard stability; easy to maintain (individual electrode replacement only required)
- 150 sample continuous rack loader
- Whole blood sampling capability for HbA1c testing

DS-13185B

Available for Distribution in the U.S.

AU680 Clinical Chemistry System Specifications

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
Photometric 113,
Serum Indices (LIH), HBA1c
(Thb, HbA1c + HbA1c%) and ISE

Onboard Parameters
60 photometric tests + 3 ISE (Na,K ,Cl)

Throughput
800 photometric tests/hour, up to 1,200 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 (barcodes 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 interleaved
Mixed readable (max 4 types at the same time)

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 hard glass cuvettes

Reaction Time
Up to 8 minutes, 33 seconds

Reaction Temperature
37°C

Reaction Method
Dry Bath

Photometric Range
0–3.0 OD

Wavelength
13 different wavelengths between 340–800 nm

Calibration
Auto calibration, advanced calibration, cooled calibrator positions
Master calibration established by 2D barcode
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)
50 x 50 x 36 in (1,250 x 1,280 x 930 mm)
analyzer 1,014 lbs (460 kg)
26 x 37 x 45 in (670 x 940 x 1140 mm)
sampler 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 uS/cm filtered with a 0.5um filter

Temperature & Humidity
18 to 32°C, 40% to 80% RH (no condensation)

Drain Requirements
Built in waste pump
Drain required: maximum height from floor < 1,5 m (< ~ 59 in.)

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