



## AU680 CLINICAL CHEMISTRY SYSTEM



### INTRODUCTION >

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 1200 with ISEs) and 63 on-board parameters, the AU680 delivers field-proven reliability and efficiency to laboratories around the world.

## DESIGNED FOR FLEXIBILITY IN THE LAB >

- › 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 3 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 are 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 micro sampling
- › 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

## 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/hour, up to 1200 with ISE<sup>†</sup>  
ISE sample throughput: 200 per hour<sup>†</sup>  
ISE maximum tests/hr: 600 if ISE only<sup>†</sup>

### 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<sup>†</sup>  
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 Barcode Formats

NW7, CODE 39, CODE 128, ISBT-128, 2 of 5 standard, 2 of 5 interleaved  
Mixed readable (max 4 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 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<sup>†</sup>

### 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)

49 x 50 x 37 in (1250 x 1280 x 930 mm)  
analyzer 1014 lbs (460 kg)  
26 x 37 x 41 in (670 x 940 x 1040 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 0.5 µm filter

### Temperature & 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)