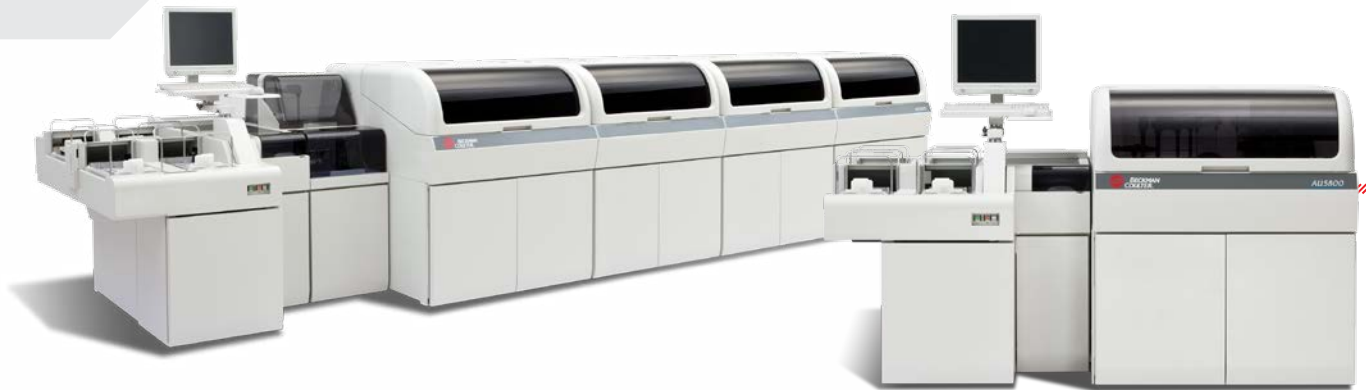


INSTRUMENT SPECIFICATIONS

AU5800 CLINICAL CHEMISTRY SYSTEMS



CONTINUOUS OPERATION AND POWERFUL THROUGHPUT FOR THE LABORATORY >

The AU5800 chemistry systems are designed to meet a full spectrum of processing throughputs for various laboratory environments. From high-volume hospitals to ultra high-volume reference laboratories, the AU5800 completes the full performance range offered by the AU family of chemistry analyzers.

- » Multiple configurations, ranging from one to four analyzer units
 - Each unit can be programmed with a maximum of 54 onboard assays
 - Software can be programmed for a maximum of 120 different assays
- » Choice of single or dual ISE flow cell(s)
- » Intuitive graphical user interface
 - Sample tracking
 - Reagent inventory data by day of week
 - Patient results displayed in “real time”
 - User-defined, customized menu
 - Color alerts to highlight system operating alerts
- » Precision micro sampling
- » High capacity rack trays holding a total of 400 samples to maximize walk-away capability
- » Three lanes to transport racks – including bypass lane with true STAT interrupt capability
- » AU proven reliability with quick and easy 3&60 parts replacement: no more than 3 steps and not longer than 60 seconds
- » Designed for connectivity to laboratory automation

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

Onboard Parameters: 120

Number of Simultaneous Analytes

AU5810 one-unit (including ISE): 57
 AU5820 two-unit (including ISE): 111
 AU5830 three-unit (including ISE): 120
 AU5840 four-unit (including ISE): 120

Throughput

AU5810 up to 2,000 photometric tests/hr
 AU5820 up to 4,000 photometric tests/hr
 AU5830 up to 6,000 photometric tests/hr
 AU5840 up to 8,000 photometric tests/hr

ISE (Optional)

Single flow cell: up to 900 tests/hr
 Double flow cell: up to 1,800 tests/hr

Sample Types

Serum, plasma, urine and/or other fluids

Sampler Capacity

400 samples (2 x 20 rack set)
 10 samples per rack (bar-codes on primary tubes and on racks)
 STAT loading via emergency rack using STAT port

Sample Tubes

Primary and secondary tubes: inner diameter between 9 and 15 mm
 height between 55 and 102 mm; Nested micro cups

Sample Volume

1.0 – 17µL in 0.1µL increments

Sample Quality Analysis

Lipemia, Hemolysis, Icterus Indices
 Clot detection and probe crash protection

Sample Barcode Formats

Mixed barcodes: NW7 (Codabar), Code 39,
 Code 128, 2 of 5 interleaved, ISBT code 128

Reagent Supply

54 positions for R1; 54 positions for R2 per unit refrigerated 4°C – 12°C

Reagent Volume

Dispensing volume from 10 µL–170 µL (1µL increments)

Total Reaction Volume

80–287µL

Reaction Cuvette

Permanent glass cuvettes

Reaction Time

Up to 8 minutes, 39 seconds

Reaction Temperature

37°C (+/- 0.3°C)

Reaction Method

Dry Bath

Wavelength

13 different wavelengths between 340–800 nm
 Monochromatic and bichromatic

Calibration

Straight line, polygonal line, approximate curve, spline-function
 Auto and advanced calibration
 200 calibrators can be programmed, up to 7 points per curve
 History of graphical calibration data stored

Quality Control

Westgard rules, Twin Plot and Levey Jennings graphs 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 to 100 times)

Online

Full uni- and bi-directional host query communications possible

Operating System

Windows® XP Professional

Data Storage

Hard drive up to 100,000 samples
 Reaction monitor 400,000 tests
 External Storage USB

Power Supply

200V, 208V, 220V, 230V, 240V (within +/- 10%)
 Frequency: 50Hz, 60Hz +/- 3%
 Maximum rate supply 1 unit 6 kVA, 2 unit 8 kVA,
 3 unit 10 kVA, 4 unit 12 kVA

Water Supply Information

Mean water consumption: (50/60Hz)
 AU5810: 62 L/hr, AU5820: 124 L/hr, AU5830: 186 L/hr, AU5840: 248 L/hr,
 ISE: 2.0L/hr/unit
 Water Type: Deionized CAP Type II, Bacteria Free, Continuous Flow Supply
 Conductivity: 2.0 uS/cm or less filtered with a 0.5 um filter

Temperature & Humidity

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

Drain Requirements

Built in waste pump
 Drain required: maximum height from the floor <1.5 m (< ~ 59 in)

Installation Requirements

	Dimensions W x D x H (in)	Dimensions W x D x H (mm)	Weight (lbs)	Weight (kg)
AU5810*	85×62×63	2,150×1,580×1,600	2,028	920
AU5820*	126×62×63	3,210×1,580×1,600	3,351	1,520
AU5830*	168×62×63	4,270×1,580×1,600	4,674	2,120
AU5840*	210×62×63	5,330×1,580×1,600	5,997	2,720
AU5810 w/ISE*	102×62×63	2,600×1,580×1,600	2,359	1,070
AU5820 w/ISE*	144×62×63	3,660×1,580×1,600	3,682	1,670
AU5830 w/ISE*	186×62×63	4,720×1,580×1,600	5,005	2,270
AU5840 w/ISE*	228×62×63	5,780×1,580×1,600	6,327	2,870
Analyzer unit only	42×62×50	1,060×1,580×1,260	1,323	600
Sampler (w/monitor arm)	43×59×63	1,090×1,500×1,600	705	320
ISE	18×45×48	450×1,140×1,210	331	150

* Includes Sampler.

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