

# 4Bio Complex

## Technical Specifications



<b>SIZE</b>	Height: 110.8 cm ( in) Depth: 85 cm ( in) Width: 122 cm ( in)
<b>WEIGHT</b>	Weight: 450 kg ( lbs)
<b>POWER SUPPLY</b>	AC 220 V $\pm$ 10 %, 50/60 Hz, 2.6 kVA
<b>SAMPLING ARM</b>	1 sampling needle, 2 reagent needles, 2 mixing paddles Capacitive liquid level detector Needle-shock sensor
<b>HYDRAULIC SYSTEM</b>	Containers: Water (2 L), Waste (2 L)
<b>REAGENTS TRAY</b>	2 removable racks, refrigerated when on-board, 45 positions each
<b>SAMPLES TRAY</b>	Removable tray, 84 positions for routine samples, 61 refrigerated positions for calibrators and controls
<b>CUVETTE ROTOR</b>	231 washable plastic cuvettes, optical path: 10 mm
<b>REACTION CELLS</b>	Built-in washing station
<b>OPTICAL GROUP</b>	14 different wavelengths: 340, 410, 451, 478, 505, 545, 571, 596, 658, 694, 751, 805, 845, 884 nm
<b>CONTROL</b>	Real-time multitasking microprocessor-based control Easy access to the electronics
<b>EXTERNAL COMPUTER</b>	Industrial Embedded PC 18-inch touch screen 4GB RAM, Windows XP USB port
<b>PIPETTING</b>	Volume: 1 - 25 $\mu$ l (sample), 80 - 430 $\mu$ l (reagent)
<b>REACTION</b>	300 - 500 $\mu$ l reaction volume
<b>SAMPLE DILUTION</b>	Automatic pre-dilution in a reaction cuvette, up to 1:100 Automatic test repetition with dilution
<b>REFRIGERATION</b>	Reagent refrigeration, 8-12°C
<b>TYPES OF TESTS</b>	Endpoint, bichromatic endpoint, differential endpoint, differential endpoint sample blank, fixed time, kinetic
<b>TEST RUNS</b>	Random / Urgent
<b>MEASUREMENT RATES</b>	800 tests/h for single reagent run
<b>SLEEP MODE</b>	Start-up and Shut-down can be programmed by weekly timer
<b>CALIBRATION</b>	Linear: factor, linear, linear regression Non-linear: cubic spline
<b>MAINTENANCE</b>	Procedures programmed by component life counters
<b>PRINTING</b>	Single test, complete sample, work sheet, calibration, method and QCs
<b>REPORTS</b>	Automatic sample reports upon test completion if requested, Export as .csv, .xls, .doc, .pdf
<b>NEEDLE WASHING</b>	Sampling needle washed internally and externally with water after every operation, special needle wash routine upon request

<b>POWER</b>	Standard VDE removable power cord
<b>HOST/ LIS</b>	Ethernet LAN (samples, work list, results) Standard ASTM ASCII protocol
<b>QUALITY CONTROL</b>	Up to three-level controls per test, one-month monitoring Reagent/calibrator/control lot monitoring,
<b>ERROR LOG</b>	Automatically stored at run-time, can be viewed or printed