

ALCOR

Auto-Chemistry Analyzer



- Random access instrument
- Up to 175 tests per hour
- Reusable cells with wash station
- Innovative Hi software
- 30 reagent positions
- Easy maintenance
- Handling of urgencies
- Run with software



"Building on the proven success of the Echo line, and with its newly conceived design, Alcor embodies the technical improvements gained during the evolution of our classic models while incorporating the new techniques that have been developed

MADE IN ITALY



Microbiology E.A. Ltd

...Redefining Point of Care Testing...

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"Less is More" Alcor 101

Physical characteristics

SIZE / WEIGHT	Height : 40 cm (15.7 in) Depth : 67 cm (26.4 in) Width : 60 cm (23.6 in) Weight: 32 kg (70.5 lbs)
POWER SUPPLY	100-240 VAC, 50 / 60 Hz, single phase with ground Independent on-off switch for refrigerated reagent plate Fuse compartment / fuses: 2 Amp @ 230 Vac, 4 Amp @ 115 Vac Power consumption: less than 200 VA (external PC excluded) Ground resistance: less than 0.10 Ohm Leakage current: less than 2.5 mA
SAMPLING ARM	1 sampling needle, 80 mm needle stroke Capacitive liquid level detector
DILUTER SYRINGE	Long life plunger Syringe capacity, 368 µL Syringe resolution 0.14 µL
HYDRAULIC SYSTEM	6 selfpriming peristaltic pumps (life 1000hrs) with replaceable neoprene cassette (life 500hrs) 2 vacuum pumps Pinch valve Manifold Containers* : Water, 5L; Cleaning solution, 2L; Waste, 5L * equipped with level sensor and safety connections
WASH STATION	Needles: 4 dispensing, 5 aspiration, 1 cleaning (8 step washing sequence for each cuvette)
REAGENTS TRAY	Removable rack 30 bottles, 38 mL or 24 mL (up to 1140 mL total)
SAMPLES TRAY	Removable tray, 30 + 20 numbered positions, 30 tubes of 12 x 75 mm / 20 cups (3,5 ml type)
CUVETTE ROTOR REACTION CELLS	80 washable BIONEX® cuvettes which allow up to 30 000 tests per rotor Optical path 6 mm, 210 - 350µL reaction volume 100W heating resistance, temperature sensor, safety thermostat
OPTICAL GROUP	1 halogen lamp (6 V, 10W) with extended UV emission 2 focusing lenses, optical glass 10 position filter disk 8 positions provided with interference filters of 340, 405, 505, 546, 578, 600, 650, 700 nm wavelengths 1 free position and 1 solid position for dark reading Direct reading reaction cuvettes 6mm optical path ±2 nm on peak wavelength, band pass of ±10 nm
PHOTOAMPLIFIER	Photoelectric detector Signal amplifier Response range, 320 nm to 900 nm Photometric range, 0 to 2.5 Abs Linearity, ±0.5% full scale Precision: 0.5 CV% (0.050 to 1.500 Abs) Stability: daily reader offset less than 1% drift per day
CONTROL	Real-time multitasking microprocessor based control Easy access to the electronics
EXTERNAL COMPUTER	(Minimum requirements) CPU: dual Core, 1.7 Ghz RAM: 2GB I/O: USB 2.0 port Display: minimum resolution 1280x900 OS: Windows® 7, 8, 8.1, 10 Framework: .NET framework 4.0

Operation Features

PIPETTING	Volume: sample, 2 - 300µL: reagent, 5-350 µL Precision: 1.5 CV% at 2 µL: 1 CV% at 4 µL Mixing by sample needle upon dispensation.
REACTION	Reaction volume, 210 - 350µL
SAMPLE DILUTION	In-needle-dilution if allowed by method's sample volumes Automatic pre-dilution in a reaction cuvette, up to 1: 100
TEMPERATURE CONTROL	Reagent refrigeration, circa 12 °C below room temperature Reaction cells, heating unit can be set from room temperature up to 42 °C ±0.2 °C (108 °F±0.5 °F)
TYPES OF TESTS	Endpoint, Bichromatic endpoint, Differential endpoint, Differential endpoint sample blank, Fixed Time, Kinetic
TEST RUNS	Random / Urgent
MEASUREMENT RATES	100 tests/hour for double reagent run 175 tests/hour in single reagent mode Maximum incubation + reading time: 660 seconds Typical precision, endpoint kinetic 2.0 CV% Carry-over, lower than 15 parts per million
START-UP	The start-up procedure is run daily: self test, reader offset of optics, wash and check of all cuvettes
CALIBRATION	Reagent blank subtraction, 1 to 8 standards per test method Linear: factor, linear, linear regression (standards's repetitions) Non linear (3 interpolation types): cubic-spline, poly-linear and logit-log four parameters Free standard / control positions on all the sample plate Results can be recalculated when changing factor or curve
MAINTENANCE	Procedures programmed by component life counters
PRINTING REPORTS	Single test, complete sample, work sheet, method and Qcs Automatic sample reports upon test completion if requested
NEEDLE WASHING	Sampling needle washed internally and externally with system solution after every operation

Connections

POWER	Standard VDE removable power cord
EXTERNAL PC	USB port
HOST / LIS	Ethernet LAN (samples, work list, results) Standard ASTM ASCII protocol

Database

WORKLIST/ SAMPLES	For each worklist: unlimited number of samples, unlimited number of tests, up to 99 sheets of tests per worklist Sample patient ID codes
TEST METHODS	Unlimited number of methods in PC memory 50 active methods
QUALITY CONTROL	Three-level controls per test, one month monitoring Reagent/calibrator/control lot monitoring, Exclusion of failing results from graphic and statistics
ERROR LOG	Automatically stored at run-time, can be viewed or printed Powerful on-line monitoring



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