



AviChemTM

Clinical Chemistry



WHERE ACCURACY
MEETS SIMPLICITY

HARDWARE

AviChem Midi™ offers a robust new compact design with random access throughput typically 300 tests/hour, high performance and precision, minimal maintenance and best solutions for the benchtop laboratory.

■ PERFORMANCE & PRECISION:

AviChem Midi™ has a capability of performing 300 tests/hour by double sampling arms that reduces reagent contamination and thus makes it better suited for laboratories with large testing volumes.

- Direct reading of clinical chemistry and turbidimetry
- Additional sample setting during operation (primary tubes, vacuum and /or cups).
- Real STAT interrupt is available at any time
- Tied to proven methodologies, referenced and traceable
- Single, dual and triple reagent for each programmed parameter
- All type of test that we need: Mono and bi-chromatic end point, Differential, Fixed time and Kinetic (with or without sample blank)
- Linear and no linear calibration with blank subtraction, from 1 to 8 standards per test method
- Automatic pre and post dilution
- Automatic detection of level liquid: reagent and sample
- High precision of pipetting system: for the reagent from 2 to 350 µL; for the sample from 2 to 300 µL: 1.5% CV at 2µL
- Sample barcode reader by default
- Wash stations allows the automatic wash of 80 cuvettes

■ DESIGN & FLEXIBILITY:

By its ergonomic design and effective use of consumables, Avichem Midi offers an easily maintenance and reduce the operational cost.

- Size & weight: 85 (W) × 62(D) × 49(H) cm / 55 Kg
- Low water consumption
- No need of direct water connection and deionize
- Reduced waste: Normal and biohazard waste separated
- Procedures programmed by component life counters
- Wash station: Automatic wash for 80 washable BIONEX cuvettes which allow up 30000 tests
- Simple yearly maintenance procedure



SOFTWARE

■ USER FRIENDLY & DYNAMIC SOFTWARE:

This software allows the full easy control of the system and real-time support to the user.

- Unlimited number of methods in PC memory with 100 active methods
- Addition of new samples
- For each worklist: unlimited number of samples, unlimited number of tests, up to 99 sheets of tests.
- Tests archive with power full search tools
- Possibility to import or export sample data with many different file forms: PDF, Word, Excel, and JPG
- Automatic detection of the level liquids with real-time update
- Automatic application for conversion of all units
- Three-level controls per test, one month monitoring and exclusion of failing results from graphic and statistics
- Real-time tracking of calibration and reaction graphs

Technical Specification



SYSTEM DESCRIPTION

- Direct reading of all clinical chemistry and turbidimetry test
- Random access
- Up to 300 tests/hour

ASSAY TYPE

End point Mono and Bichromatic Differential, Fixed time and Kinetic up to 100 tests fully programmable and active (with 3 reagents for each methods)

ON-BOARD REAGENTS

2 Removable reagent racks 30+30 bottles = 60 refrigerated positions (50 or 25 ml)

SAMPLE LOADING

- Removable tray with 60 positions for tubes or cups (metal adapter)
- Automatic pre and post dilution
- Urgent sample (STAT) allowed at any time

OPTICS SYSTEM

- Halogen lamp (6V, 10w) with extended 2 focusing lenses, optical glass
- 8 filters: 340, 405, 505, 546, 578, 600, 650 and 700wave length (+2 others free positions)
- Photometric range 0 to 3 Abs Linearity (0.5% from 0.1 to 1.5 Abs)
Precision : 1 % CV or 1 abs min.

SAMPLING ARM

- 2 arms sampling needles, 10 mm needle stroke.
- Capacitive liquid level detector: Reagent and Sample.
- Needle washed internally and externally after every operation with shock sensor

REACTION PLATE

- 80 washable Bionex cuvettes allows up to 30000 tests
- Rotor Optical path 6mm, 210-350 μ l reaction volume
- 100W heating resistance, temperature sensor, safety thermostat
- Wash Station: Needles = 6 dispensing, 5 aspiration, 1 cleaning

PIPETING

- Volume: sample 2-300 μ l; reagent 2-350 μ l
- Precision: 1.5 CV% at 2 μ L; 1CV% at 4 μ l, Resolution: 0.14 μ l
- Mixing by sample needle upon dispensation
- Long life syringe

EXTERNAL COMPUTER

- Minimum requirements: Intel i3 family 4GB Ram
- Minimum Resolution: 1280 x 768
- Microsoft windows 7 or 10 Framework ; Net framework 4.6
- USB 2.0 port

SIZE, WEIGHT & POWER

H X D X W = 49 x 62 x 85 / 55 kg
100 – 240 Vac, 50/60 HZ single phase with ground
2 Amp, 230 Vac, 3.15Amp, 2.5 Ma



AVICENNA™
Reliably Accurate

Avicenna™ aims to provide innovative and smart diagnostic products and tools to today's modern laboratories. The company's range of products is the result of in-house research and development as well as collaborations with reliable manufacturers.

Our mission is to provide Innovative Diagnostic Products to the World

