

## TECHNICAL SPECIFICATIONS

### SYSTEM TYPE

Automatic clinical chemistry analyser – random access system, STAT samples processing

### THROUGHPUT

400 photometric tests/hour  
640 tests/hour with ISE

### ON-BOARD PARAMETERS

Up to 45 photometric tests + 4 ISE

### SAMPLE TYPE

Serum, plasma, blood, urine, CSF, other biological fluids

### NO. OF PROGRAMMABLE PARAMETERS

96 photometric tests, 40 calculated tests and 4 ISE parameters

### ASSAY METHODS

End-point, kinetics, ISE (direct potentiometry)

### CALIBRATION TYPE

Linear (one point, multi point), exponential, polynomial, factor, cubic spline, Logit-Log 4P, Logit-Log 5P

### OPTICAL SYSTEM

Halogen lamp, 12 wavelengths: 340, 376, 415, 450, 480, 505, 546, 570, 600, 660, 700 and 750 nm (diffraction grating)

### REAGENT TRAY

56 refrigerated positions (8-12°C)  
5, 20, 50 ml reagent containers

### SAMPLE TRAY

80 positions:  
Outer ring – 50 position for samples  
Inner ring – 30 positions for blanks, standards, calibrators, controls and ISE solutions

### REAGENT DISPENSING

2 independent dispensing probes with liquid-level sensor  
Dispensed volumes:  
R1 50 – 300 µl with 1 µl step  
R2 10 – 300 µl with 1 µl step

### MINIMAL REACTION VOLUME

180 µl

### REACTION TRAY

72 reusable hard glass cuvettes, optical path length 5 mm

### MIXING SYSTEM

2 independent stirrers,  
3 mixing speeds

### QC

Levey-Jennigs charts,  
Westgard rules

### BARCODE READER

Built-in barcode reader

### WATER CONSUMPTION

Maximum 13 litres/hour

### PC REQUIREMENTS

Operating system:  
Up to Win 10, Pentium 4,  
RAM 512 MB, HDD 200 GB,  
resolution 1024 x 768

### POWER SUPPLY

220 V ± 10 %, 50 Hz ± 5%, 600 VA

### DIMENSIONS

910 mm (w) x 780 mm (d)  
x 1 160 mm (h)

### BACKUP

Complete or selected data



**COMPACT.  
HIGH PERFORMANCE.  
32-BIT MICRO CONTROLLER BASED.**



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TOTAL SOLUTIONS FOR CLINICAL DIAGNOSTICS

Version No 1.1

**CHEM-7**  
SEMIAUTOMATIC  
BIOCHEMISTRY ANALYZER

# CHEM-7

## Semiautomatic biochemistry analyzer

### Open system

Measure principle:  
colorimetry, turbidimetry, immunoassays

### Optical Module

- Static photometer
- 8 interference filters:  
340, 405, 450, 505, 546, 578,  
600 and 670 nm
- Silicon photodiode detectors
- Photometric range from 0 to 3.0 OD
- Quartz halogen lamp – 12V, 20W

### Measuring Module

- Unique triple cuvette system
  - o 18 µl flow cell (33 µl optional)
  - o 10 mm square cuvette
  - o 6 mm round glass tube  
with adapter for coagulation tests
- Peltier temperature control:  
20 – 40°C ± 0.1°C
- Peristaltic pump
- Aspiration volume programmable  
from 100 µl to 2997 µl

### Memory

- 5000 test results

### Results recall

- Collated reports by date, ID or both

### Printer and Keyboard

- 41 fixed and 6 dynamic keys

### 10 operation modes

- 1-point linear
- 2-point linear
- 1-point non-linear
- 2-point non-linear
- Rate A linear
- Rate A non-linear
- 1-point sample blank linear
- 1-point sample blank non-linear
- Absorbance
- Coagulation

### QC

- Levy – Jennings chart available  
for three controls per test
- Daily and monthly QC

### Display

- High resolution graphic LCD  
320 x 240 with backlight
- View area 120 x 92 mm

### Interfaces

- USB B type port for host computer
- USB A type port  
for external USB DeskJet printer
- External PC/AT keyboard

### Mains Supply

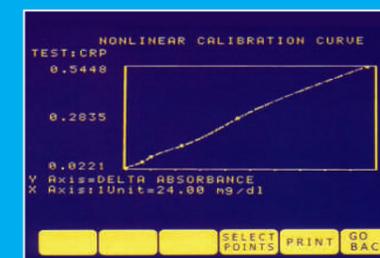
- 115/230V AC (±10%), 50/60 Hz  
(input for power adapter)
- External universal SMPS adapter  
(18/19.5V; 65/90W)

### Size and weight

- Size (mm): 410 (l) x 292 (w) x 195 (h)
- Weight: approx. 7 kg

### Optional accessories

- External 16 position dry block incubator
- External battery back-up



Multistandard calibration



16 cell thermostat



Battery



Connection of the keyboard



Printout of reports with external printer