

# microlab 300

SEMI AUTOMATED CLINICAL CHEMISTRY ANALYSER

A  
giant  
in  
performance



 **vital scientific**

GIVING YOU PEACE OF MIND

The new Microlab 300. A true semi-automated clinical chemistry analyser in all its glory. A system that is designed as a clinical chemistry analyser and not as a standard photometer. That's what makes the difference! The new Microlab 300 extends the excellent reputation of the Microlab family which tens of thousands of users all over the world can confirm to you.

# microlab 300

## Small in size, a giant in performance

- True user orientated software: convenience;
- Full size qwerty keyboard and full size display: ease of operation;
- Reagent volume 30% less than most competing systems: substantial savings on reagent;
- In-built printer: no add-on parts and saves lab space;
- High reliability and almost no need for maintenance parts: low maintenance cost;
- No warm-up time: always ready to measure.

Whether you call it Low Cost per Test or Low Cost of Ownership, the unique features of the Microlab 300 save you money.





SIPPER SYSTEM



FULL SIZE SCREEN AND QWERTY KEYBOARD



MICROLAB 300 WITH OPEN SERVICE COVER

### You name it, the Microlab 300 does it

- Clinical Chemistry
- Special Proteins
- Drugs of Abuse
- Therapeutic Drugs
- Electrolytes

The new Microlab 300 shows excellent performance for almost every application. Low volumes, low concentrations, turbidimetrics, the superior optical design of the Microlab 300 offers you the accuracy you need. And under every lab condition.

### A clinical chemistry analyser without compromises

The full size screen and qwerty keyboard allows interactive and intuitive operation of the Microlab 300. No strange keystrokes or hardly readable displays. The Microlab 300 offers true convenience and minimizes the risk of false data input.

### Maintenance

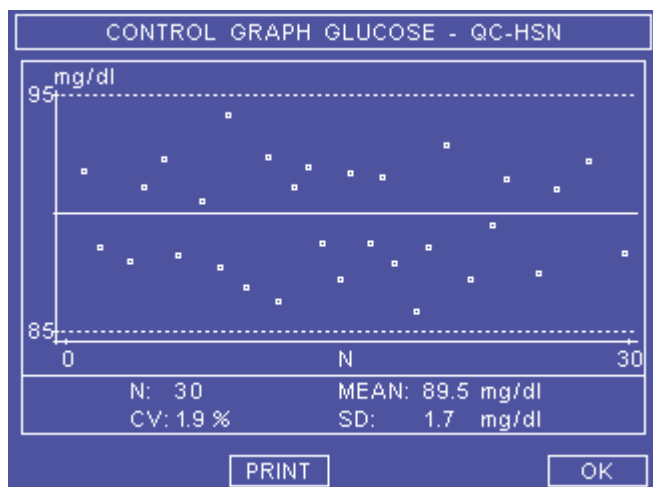
The Microlab 300 has a special cover for maintenance purposes. Replacing the paper-roll or changing user-servicable parts is just a matter of minutes. The software displays the corresponding instructions in detail.

### Sipper System

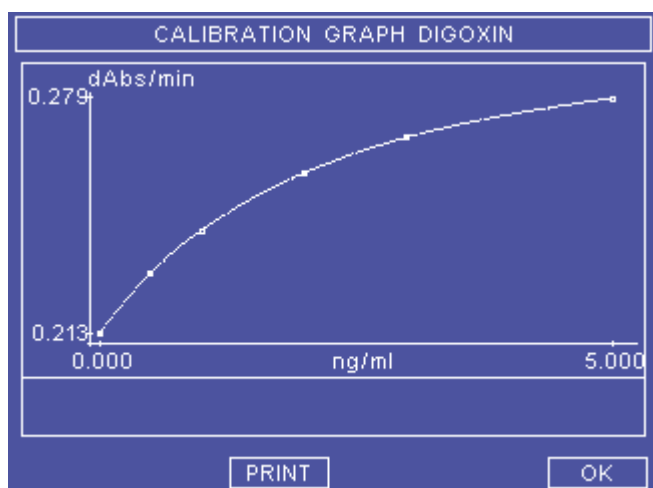
The unique sipper and pump system provides the measuring unit with the reaction mixture. Measurement takes place in a specially designed micro flowcell, which is thermostatted by Peltier elements. The measuring volume of only 30  $\mu$ l contributes to savings in reagent use.

EVALUATE PATIENT	
18:43	04/26/2001
PATIENT NAME	JONATHAN SMITH
SAMPLE CODE	AD-425
TESTNAME	GLUCOSE
CONCENTRATION	
101 mg/dl	
MEASUREMENT	
0.251 Abs	
MAIN	PRINT
OK	

SAMPLE EVALUATION



QUALITY CONTROL



CALIBRATION CURVE

### Simplicity

Discover the simplicity of operating with the new software. A skilled lab technician will be able to run the Microlab 300 within 15 minutes. The software guides you through the menus in a logical and intuitive way.

### On-Board Quality Control

QC results are stored in memory and are clearly displayed on the screen. The software calculates the mean, standard deviation and coefficient of variation. Validation and a display of the Levey Jenning plot are also included.

### Patient Results

Retrieval of results becomes even simpler with the Microlab 300. A special evaluate patient menu gives the possibility to retrieve measured data very easily. Up to hundred patient result reports are automatically stored.

### Host Connection

Bi-directional Host Connection allows the analyser to download parameter settings, system parameters and software upgrades from the host computer and to transmit patient data to the data management system.

# S P E C I F I C A T I O N S

## LIGHT SOURCE

- Quartz-halogen lamp 12V-20W.

## WAVELENGTH RANGE

- Automatic by 12 positions filter-wheel;
- 6 standard interference filters: 340, 405, 505, 546, 578 and 620 nm;
- 6 positions for optional filters.

## PHOTOMETRIC RANGE

- -0.1 to 2.3 Absorbance.

## DETECTOR

- Photo diode (320-1000 nm).

## BLANKING

- Automatic zero setting.

## OPERATOR INTERFACE

- Membrane keyboard, for direct function and alpha-numeric entry;
- Optional external keyboard;
- High contrast graphical LCD display;
- Real time clock, 24 hours system.

## LANGUAGES

- English;
- Spanish;
- French;
- German;
- Portuguese;
- Other languages on request.

## MEASUREMENT PROCEDURES

- Kinetic, with linearity check;
- Kinetic, with linearity check and sample slope blank;
- Two point kinetic, with or without reagent blank;
- End point, with or without reagent blank;
- Bichromatic end point, with or without reagent blank;
- End point, with sample blank and with or without reagent blank.

## MULTIPLE TESTING

- Up to nine replicates;
- Means, SD and CV.

## MEASURING TIME

- Programmable, 2 to 998 seconds for kinetic and two point type of tests;
- For end point fixed at 2 seconds.

## DELAY TIME

- Programmable, 0 to 999 seconds.

## METHOD PARAMETER SETTINGS

a.o.

- Method name;
- Measurement mode;
- Wavelength 1 and 2;
- Aspiration volume;
- Measurement delay;
- Measurement time;
- Factor;
- Concentration standards;
- Reagent blank y/n;
- Sample blank y/n;
- Units for results;
- Levels for flagging;
- Curve fit y/n;
- Linearity check.

## CALIBRATION

- Factor, one-point, two-point and multi-point;
- Automatic on 1 standard (linear mode);
- Automatic on up to 10 standards (non linear mode).

## QUALITY CONTROL

- Two controls per test;
- QC survey of last 30 control measurements;
- Levey Jenning plot;
- High/low flags.

## FLOWCELL

- Metal, with quartz windows, measuring volume 30  $\mu$ l.

## TEMPERATURE CONTROL

- By means of Peltier elements;
- Fixed temperature at 37°C.

## ASPIRATOR SYSTEM

- Internal pump of bellows type, driven by stepper motor;
- Back panel connection for waste;
- Aspiration volume programmable.

## PRINTER

- Internal matrix printer;
- Normal paper;
- External printer port available.

## SIGNAL INTERFACE

- Centronics type parallel port;
- RS 232 type serial port;
- PS 2 type port for external keyboard.

## QUALITY

- UL;
- CE;
- CB certificate.

## POWER REQUIREMENTS

- 100-240 VAC nominal, 50/60 Hz;
- Battery back-up to retain data.

## DIMENSIONS

- 40 x 17 x 36,5 cm (W x H x D).

## WEIGHT

- 8,5 kg.

In medium sized and small laboratories, the simplicity and the versatility of the Microlab 300 will handle all your test requirements while increasing productivity.

Also, the Microlab 300 will provide fast, flexible back-up for your main analyser by being on-call 24 hours a day or will operate as an independent facility for closer to patient testing in specialised clinics.

With over 40 years experience in the design and manufacture of award winning scientific and laboratory instrumentation, Vital Scientific has the proven expertise and know-how to respond to your needs.

Skilled employees, powerful design tools, precision engineering and a policy for top quality components lie at the very heart of our good manufacturing practices. By accepting nothing but the very best, Vital Scientific - an ISO 9000 / 13485 compliant and FDA registered company - is well equipped to meet the highest standards.

Over the past decades, Vital Scientific has established a solid distribution network that operates world-wide. More than twenty thousand customers have already experienced the quality, convenience and reliability of our instruments. Local support is guaranteed by dedicated and well trained sales and service organizations.

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