i Osmometer - Complete lab solution in one instrument

Technical Data

Sample volume: 50 to 100 µl
Measuring time: approx. 1.5 minutes (100 µl)
Measuring process: Automatic process
Reproducibility: ±0,5%/±1,5 mosm (100 µl), ±1%/±3 mosm (50 µl), greater value will be the correct one
Measurement range: 0 ... 2500 mosm / kg H_2O
Measurement display changeable (mosm / m°C / %0,9NaCl)
Measurement memory: 200 measurements with sample numbers, date and time, user name, cal-status
Data interfaces: 1 x USB for PC and 2 x RS 232 for PC/printer, handscanner
Power supply: 100-230V AC max. 95 VA
Dimensions: Width 190 mm, height 278 mm, depth 216 mm
Weight: approx. 4.3 kg
The Instrument is CE labelled and WEEE conform.

Accessories included:
50 plastic tubes, 2x10 vials of standard solution 300 and 900 mosm / kg H_2O, spare thermistor, spare needle, spare fuses, cleaning fluid and little funnel for cleaning needle hole, data transmitting cable RS232/USB and software, spare paperroll, operating instructions.

Calibration

The zero point is calibrated with distilled water and a standard point with the NaCl-solution of 300 mosm supplied. Occasional checks show that the calibration is very stable. An additional third point i.e. 900 mosm solution can be used to calibrate, whereby the linearity is raised by higher concentrations. Additionally it is possible to **modify the 2nd and 3rd calibration point** in wide limits.

Special Features and Advantages

- **Standard** built in **thermal printer und scanner** for sample and result documentation.
- **Menu led operation on a wide illuminated LCD graphic display with touch operation (view video).**
- Selectable languages. (German, English, French, Spanish, Portuguese, Swedish, Italian).
- Code protection (view Video) with Log-In user administration for GLP-Assistance.
- Variable 2nd and 3rd calibration points.
- Single use plastic tubes.
- **Blocking of measuring tube or needle by freezing in stand-by mode is counteracted by regular automatically defrosting.**
- Needle can be rinsed with water or disinfection solution.
- The parameters for baudrate, parity and flow control of the RS232 interfaces can be configured via the menu.
- **Integrated real time clock to sort measurements and calibrations for quality requirements.**
- Wide input voltage range 100-230VAC suitable for all countries
- Reduced operating costs as no extra water supply is necessary and power consumption is low.
- **MS-Windows software for measuring data transfer will be included.**

Operating of the Instrument

- Switch on instrument, wait for ready display (approx. 3 minutes). View Video
- Place 100 µl sample in the sample tube (± 10 %).
- Place the sample tube onto the measuring head.
- Lower the measuring head. The sample tube is dipped into the cooling slot.
- Enter sample number using the touch display or the built in scanner. These entries can also be made after measurement.
- Superercooling is reached after 1 minute and the needle with the ice crystals is dipped into the sample.
- As freezing point is reached, the display shows the measurement value in mosm / kg and the instrument gives an audible tone. The measurement value is stored in the memory.
- Slide measuring head from cooling slot and remove the sample tube.
- Wipe the thermistor with a soft tissue.

System access with code protection

Access to instrument could be code protected if wanted. Mark menu point, activate protection, create user and follow instructions.
With code protection you are able to prevent that every user could take control of your Osmometer or change system settings (like date/time) .
Choosing access code: Access code could have 1 to 12 numbers. You are able to delete users and turn log-in off.

Extra Accessories:

- Analogue output for XY-plotter
- Calibration solution 300 and 900 mosm / kg H_2O
- Thermal printer paper in standard version and with 25 years storage life
- Reception/Processing of the measuring data with a Laboratory Information System (database) is on request and in cooperation with the system manufacturer in general possible.

Subject to technical changes.

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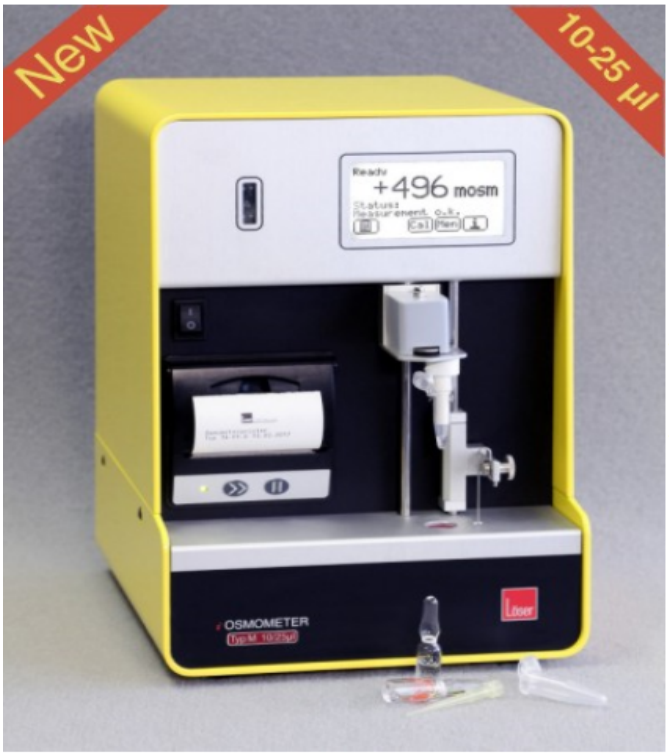
i Osmometer M - All in one micro solution for 10 to 50 µl



Technical Data

Sample volume: 10 to 50 µl
Measuring time: approx. 1.3 minutes (50 µl)
Measuring process: Automatic process
Reproducibility: ± 0,5%/±1,5 mosm (50 µl), ± 1%/±3 mosm (10 bis 25 µl), greater value will be the correct one
Measurement range: 0 ... 2500 mosm / kg H_2O
Measurement display changeable (mosm / m°C / %0,9NaCl)
Measurement memory: 200 measurements with sample numbers, date and time, user name, cal-status
Data interfaces: 1 x USB for PC and 2 x RS 232 for PC/printer, handscanner
Power supply: 100-230V AC max. 95 VA
Dimensions: Width 190 mm, height 278 mm, depth 216 mm
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Special Features and Advantages

- Very small sample volumes possible.
- **Standard** built in **thermal printer und scanner** for sample and result documentation.
- Menu led operation on a wide illuminated LCD graphic display with touch operation (view video).
- Selectable languages. (German, English, French, Spanish, Portuguese, Swedish, Italian).
- Code protection (view Video) with Log-In user administration for GLP-Assistance.
- Variable 2nd and 3rd calibration points.
- Single use plastic tubes.
- Blocking of measuring tube or needle by freezing in stand-by mode is counteracted by regular automatically defrosting.
- Needle can be rinsed with water or disinfection solution.
- The parameters for baudrate, parity and flow control of the RS232 interfaces can be configured via the menu.
- Integrated real time clock to sort measurements and calibrations for quality requirements.
- Wide input voltage range 100-230VAC suitable for all countries
- Reduced operating costs as no extra water supply is necessary and power consumption is low.
- MS-Windows software for measuring data transfer will be included.

Operating of the Instrument

- Switch on instrument, wait for ready display (approx. 3 minutes). View Video
- Place 25 µl sample in the sample tube (± 10 %).
- Place the sample tube onto the measuring head.
- Lower the measuring head. The sample tube is dipped into the cooling slot.
- Enter sample number using the touch display or the built in scanner. These entries can also be made after measurement.
- Superercooling is reached after 1 minute and the needle with the ice crystals is dipped into the sample.
- As freezing point is reached, the display shows the measurement value in mosm / kg and the instrument gives an audible tone. The measurement value is stored in the memory.
- Slide measuring head from cooling slot and remove the sample tube.
- Wipe the thermistor with a soft tissue.

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