

OSMOMETER

DETERMINATION OF TOTAL
OSMOLALITY OF **AQUEOUS LIQUIDS**

TOTAL OSMOLALITY DETERMINATION
OF PHYSIOLOGICAL LIQUIDS AND
INFUSION SOLUTIONS

- FAST AND EASY
- SMALL AND ROBUST
- LOW COSTS
- HIGH PRECISION MEASURING HEAD



The newest freezing point Osmometer allows an easy and fast determination of the osmolality of various aqueous solutions. In addition, the freezing point depression of these samples can be measured. In combination with the robust and intelligent design, the Osmometer allows fast and reproducible measurements. In addition, the data can optionally be exported into various formats for archival storage.

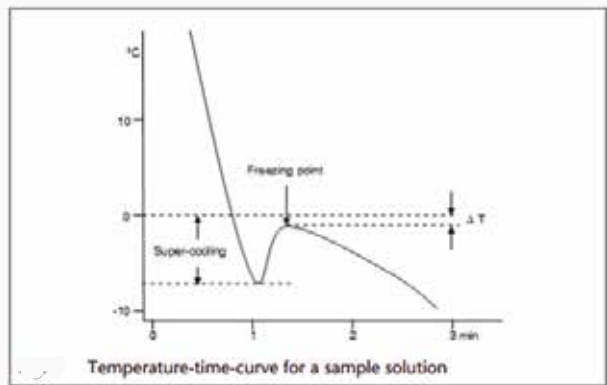
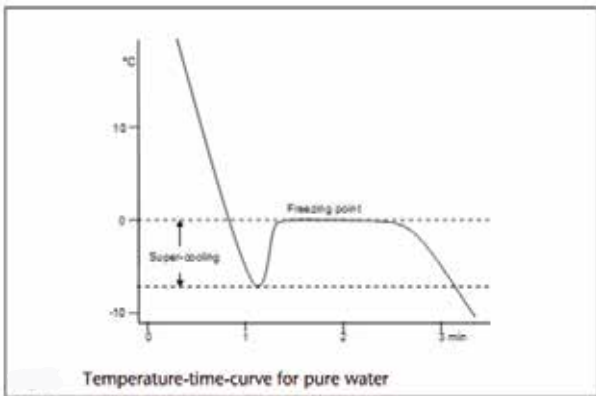
The instrument is equipped with a Peltier air cooler and an integrated microprocessor. The measuring head is available in two versions, one for glass vials and one for plastic vials with attached cap. It can be connected to a printer or directly to our Argus-RP Solution.

The Semi-Micro Osmometer measures the freezing point depression of liquid samples.

The principle of total osmolality is to determine the osmolality of body fluids such as blood (serum) and urine. This is an essential routine process in clinics and QC laboratories.

Osmolality describes the concentration of osmotic effective particles in solutions, independent from type, composition or electrical charge. The osmolality refers to the mass of the solution, meaning 1 kg of pure water.

- ° 2- or 3-point calibration
- ° Automatic storing of measurement values
- ° Air cooling
- ° Cooling process is thermistor controlled
- ° Cooling chamber will not freeze Medical applications
- ° Control of infusion solutions in pharmacies
- ° Control of iso, hyper, and hypotonic solutions
- ° Control of osmotic pressure in cell culture media for biotechnology and genetic technology



Technical Specifications

| | |
|------------------|---|
| Sample volume | 50 - 150 µl |
| Osmolality range | 0 - 2000 mOsmol / kg |
| Resolution | 1 mOsmol / kg |
| Measurement time | -2 min |
| Precision | SD ≤ 4 mOsmol / kg [0 - 400 mOsmol / kg], RSD ≤ 1% [400 - 2000 mOsmol / kg] |
| Linearity | ± 1% [0 - 1500 mOsmol / kg], ± 1,5% [0 - 2000 mOsmol / kg] |
| Calibration | Two-point calibration (0 mOsmol / kg and one free selectable osmolality). Optional : three-point calibration (0 mOsmol / kg and two free selectable osmolalities). |

Communication

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|------------|--|
| Interfaces | RS-232 port |
| Control | Keypad (LED display, 2 rows with 24 characters). Optional software |

General

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|--------------------|--|
| Power supply | 100 - 240 V, 50 - 60 Hz, 70 W |
| Ambient conditions | 10 - 35°C, 20 - 80% relative humidity (non condensing) |

Physical Specifications

| | |
|------------|---|
| Dimensions | W160 x H182 x D340 mm (W63xH71,6xD133,8") |
| Weight | 4,5 kg (8,8 lbs) |