

FreezePoint®
Freezing Point Osmometer
50µL Sample Size



THE PERFECT LABORATORY COMPANION TO DETERMINE OSMOTIC STRENGTH

A non-invasive in-vitro diagnostic product used to determine the osmolality of aqueous solutions.



ADVANTAGES OF THE FREEZEPOINT®

- Controlled easily via a touch screen display
- Step by step user guidance through all measurement functions
- Two or three point calibration
- Robust design of the instrument makes it easy to handle and maintain
- Automatic calibration using ELITechGroup's calibration standards
- Last result remains available after switching to automatic standby mode
- QM assistance for the laboratory supervisor
- For data transfer to a PC it can be connected via USB or RS232
- On-board printer to output results (Model 6000SP)

DESIGNED FOR

FreezePoint is designed for routine measurements in the medical field and is also suitable for measurements in research and industry to determine the total osmolality of aqueous solutions.

The instrument only requires 50 μ L sample volumes offering rapid measurement cycles that are completed in a very short time.

MEASUREMENT TECHNIQUE

The total osmolality of aqueous solutions is determined by comparative measurements of the freezing points of pure water and of solutions. Whereas water has a freezing point of 0°C, a solution with saline concentration of 1 Osmol/kg has a freezing point of -1.858°C

SPECIFICATIONS

Model	6000S / 6000SP
Display	5.7" LCD - Touch Screen
Weight	6.5 kg (14.3 lbs.)
Dimensions (W x H x D)	205 mm x 360 mm x 220 mm (8.1" x 14.2" x 8.7")
Cooling Unit	Two separate peltier cooling systems with heat dissipation by air
Lower Cooling	Electronic temperature regulation, deviation < ± 0.1 °C
Sample Volume	50 μL / single sample
Test Time	~ 60 Seconds
Resolution	1 mOsmol/kg H₂O
Units	mOsmol/kg H₂O
Range	0 to approx. 3000 mOsmol/kg H₂O
Precision (within run repeatability)	$SD \le 2 \text{ mOsmol/kg } [0-400] \text{ mOsmol/kg } H_2O$
	$CV \le 0.5\%$ [400-1500] mOsmol/kg H ₂ O
	CV ≤ 1% [1500-3000] mOsmol/kg H ₂ O
Linearity	\leq ±2 mOsmol/kg [0-400] mOsmol/kg H ₂ O
	≤ ±0.5% [400-1000] mOsmol/kg H ₂ O
	$\leq \pm 1\%$ [1000-2000] mOsmol/kg H ₂ O
Ambient Temperature	10 °C to 30 °C
Power Supply	100 - 240V, 50/60 Hz, 80 VA

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WORLDWIDE OFFICES

Please contact your sales representative for terms, conditions and product availability in your country.

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APPLICATIONS

- ► General medicine
- Sports laboratories
- ► Forensic medicine
- ► Electron microscopy
- Physiology
- ► Clinical laboratories
- ▶ Botany
- ▶ Pediatrics
- ▶ Gynecology
- ► Military hospitals
- ► In-vitro Fertilization
- ▶ Urology
- ▶ Nephrology
- ► Hemodialysis
- ► Veterinary medicine
- ► Intensive care laboratories
- ▶ Pharmacy
- Dispensaries
- ► Contact Lens Manufacturing
- ► Food/Beverage Manufacturing

ORDERING INFORMATION

Model 6000S	FreezePoint® Freezing Point Osmometer (50µL)
Model 6000SP	FreezePoint® Freezing Point Osmometer (50µL with printer)
SS-036	Pipettor Tips (1000 ea)
SS-275	Measurement Vessels, 1000 ea., FreezePoint®
SS-279	Measurement Vessels, 100 ea., FreezePoint®
SS-283	Calibration Standard, 100 mOsmol/kg, FreezePoint®
SS-284	Calibration Standard, 290 mOsmol/kg, FreezePoint®
SS-276	Calibration Standard, 300 mOsmol/kg, FreezePoint®
SS-285	Calibration Standard, 500 mOsmol/kg, FreezePoint®
SS-277	Calibration Standard, 850 mOsmol/kg, FreezePoint®
SS-286	Calibration Standard, 2000 mOsmol/kg, FreezePoint®
SS-281	Printer Paper, 8 rolls ea.
AC-201	Pipette, 50 μL
AC-192	Barcode Reader Kit
RP-548	USB Cable, FreezePoint®
RP-549	RS232 Cable, FreezePoint®
RP-550	Power Cord, US 120V, FreezePoint®

