



Clinical

FreezePoint®
Freezing Point Osmometer
15µL 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 stand-by 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 6000P)

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 15 µL 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	6000 / 6000P
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	15 µL / single sample
Test Time	~ 60 Seconds
Resolution	1 mOsmol/kg H ₂ O
Units	mOsmol/kg H ₂ O
Range	0 to approx. 3000 mOsmol/kg H ₂ O
Precision (within run repeatability)	SD ≤ 4 mOsmol/kg [0-400] mOsmol/kg H ₂ O CV ≤ 1% [400-1500] mOsmol/kg H ₂ O CV ≤ 2% [1500-3000] mOsmol/kg H ₂ O
Linearity	≤ ±4 mOsmol/kg [0-400] mOsmol/kg H ₂ O ≤ ±1% [400-1000] mOsmol/kg H ₂ O ≤ ±1.5% [1000-2000] mOsmol/kg H ₂ O
Ambient Temperature	10 °C to 30 °C
Power Supply	100 - 240V, 50/60 Hz, 80 VA

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 6000	FreezePoint® Freezing Point Osmometer (15µL)
Model 6000P	FreezePoint® Freezing Point Osmometer (15µL 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-199	Pipette, 15 µL
AC-192	Barcode Reader Kit
RP-548	USB Cable, FreezePoint®
RP-549	RS232 Cable, FreezePoint®
RP-550	Power Cord, US 120V, FreezePoint®



WORLDWIDE OFFICES

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

Headquarters

Australia	T: +61 1800 815 098	New Zealand	T: +64 800 555 611
Belgium & Luxembourg	T: +32 9 282 05 31	Serbia	T: +381 11 2467119
Brazil	T: +55 27 3025 1415	The Netherlands	T: +31 313 430 500
France	T: +33 4 83 36 10 82	UK	T: +44 1442 869320
Italy	T: +39 02 48 40 35 42	United States	T: +1 435 752 6011