

SUPERIOR ACCURACY AND RELIABILITY IN A NEW COMPACT DESIGN



Fiske® 210 Micro-Sample Osmometer

When you need precise, rapid results from an extremely small sample, the only answer is the Fiske® 210 Micro-Sample Osmometer. The Fiske 210 continues our 50-year commitment to osmometry - a commitment that is well known to thousands of users around the world.

The Fiske® 210 freezing-point osmometer requires only a 20µL sample size, which provides accurate osmolality results in less than 90 seconds. For convenience, the fully accessible probe design is easy to clean and service. The Fiske 210 is not only your most reliable option, it's the easiest to use. Just pipet 20µL of sample into a disposable sample tube, then place the tube into the test chamber. Lower the probe into the sample and push the "Test" button. Results are displayed in ninety seconds.

Microprocessor control ensures repeatability and accuracy. The Fiske 210 calibrates automatically at the push of a button, with no user adjustments. Because calibration is highly stable, however, the procedure is seldom required. Self-diagnostics

alert the operator to any malfunctions or abnormal test conditions through messages on the display.

Since the Fiske 210 Osmometer doesn't use a liquid cooling bath, you'll have minimal routine maintenance. In fact, you don't have to worry about preventive maintenance, either. All these features save you costly operator labor and downtime.



CLINICAL APPLICATIONS OF OSMOMETRY

Determine Osmol Gap – actual versus calculated osmolality is a rapid indicator for toxicology and trauma cases. Remember, only the freezing-point method is sensitive to alcohol and ketones.

Hydration Status for Athletes – weight class and endurance events are conducive to dehydration, with performance and health consequences.

Mannitol Treatment – maintain, without exceeding, critical level of therapeutic infusion.

Glycine Ingestion – monitor the absorption of irrigation fluids in surgical procedures.

Renal Function – evaluate concentrating ability and monitor ADH therapy.

Differentiate DKA and NKH – only a measured osmolality can make this determination and guide effective therapy.

Sample Authentication for Drug Screens – low urine osmolality is indicative of tampering.

EXCLUSIVE FEATURES OF THE FISKE 210 OSMOMETER

Alphanumeric display

Results, user prompts, and instrument diagnostics are clearly displayed.

Automatic calibration

No fine-tuning or user adjustments during calibration. The instrument's microprocessor automatically makes calibration adjustments at the push of a button.

Easy push-button operation

Requires minimum operator training.

Printer, RS232C and barcode scanner ports

A full range of data handling options are available. Unit connects easily to printer, computer, and scanner.

Smallest sample size

Only 20 microliters of sample needed.

Solid-state cooling

The 210 has no liquid cooling bath; no maintenance required.



Model 210 Single-Sample Osmometer Specifications

Sample Volume	20 μ L
Test Time	90 seconds
Sample Capacity	Single Sample
Units	mOsm/kg H ₂ O
Resolution	1 mOsm/kg H ₂ O
Range	0 to 2000 mOsm/kg H ₂ O
Communications	DTE RS-232 serial port, parallel printer port, and optional barcode scanner

Performance at Reference Conditions¹

Linearity	Less than $\pm 1\%$ from a straight line between 0 and 2000 mOsm/kg H ₂ O
Repeatability	± 2 mOsm/kg H ₂ O (1 S.D.) between 0 and 400 mOsm/kg H ₂ O; $\pm 0.5\%$ (1 S.D.) between 400 and 2000 mOsm/kg H ₂ O
Drift	Less than 1 mOsm/kg H ₂ O per month

Performance Over Operating Conditions

Temperature Effects	Less than 1 mOsm/kg H ₂ O per 5°C (9°F) ambient temperature change
---------------------	---

Operating Conditions

Temperature	18 to 35°C (64 to 95°F)
Humidity	5 to 80% relative humidity, (non-condensing)
Storage Temperature	-40 to +45°C (-40 to +113°F)
Electrical	
Voltage	100 to 240 VAC (50/60 Hz)
Power Consumption	60 Watts
Dimensions	12.0" H x 12.0" W x 9.5" D (30.5 cm x 30.5 cm x 24.1 cm)
Net Weight	13.6 lbs. (6.2 kg)
Shipping Weight	20.5 lbs. (9.3 kg)
Warranty	One-year limited warranty on workmanship and all parts except glass, plastic, and parts warranted by their makers Certification



The management system governing the manufacturing of this product is ISO 9001 and ISO 13485 registered.

¹Reference Conditions 20 to 25°C (68 to 77°F); 40 to 60% relative humidity; tolerances of reference or calibration solutions excluded

Specifications subject to change

In order to obtain peak and long-lasting performance from your osmometer, ask about these related products:

Clinitrol™ 290 Reference Solution routinely checks calibration stability.

Protinol® Near-Serum Reference, in 3 levels, gives added confidence in interlab surveys.

Renol™ is the world's only osmometer-specific control solution for laboratories testing urine samples.

Linearity Set™ documents performance, per CLIA guidelines, over full instrument range.

Fiske® Calibration Standards and Sample Kits are manufactured to exacting tolerances to ensure that your osmometer operates at peak performance.



Available from:

Hot-Line® Technical Service

Our worldwide distributor network provides comprehensive customer service and technical support.



**ADVANCED
INSTRUMENTS, INC.**

Two Technology Way / 781-320-9000
Norwood, Massachusetts 02062, USA
800-225-4034 Fax: 781-320-8181
www.aicompanies.com