

ONE STEP OSMOMETRY - ACCURATE, RELIABLE RESULTS IN ONE MINUTE

The Advanced® Model 3320 Micro-Osmometer is an automated, single-sample osmometer, designed to process a 20µL sample. The Model 3320 is ideally suited for clinical and industrial applications when sample quantity is limited.

The Model 3320 employs the industry-preferred freezing-point method. This technology has proven to be robust and dependable throughout fifty years of worldwide use in clinical and industrial laboratories. These laboratories rely on Advanced Instruments' osmometers for their accuracy, precision and reliability.

Optimal Sample Size

The Model 3320 requires only a 20µL sample and is perfectly suited for applications where a limited sample quantity is available.

Unparalleled Ease of Use

Simply aspirate 20µL of sample into the sampler tip, place the sampler in the horizontal cradle and slide forward — testing automatically begins and your results are displayed in approximately 60 seconds.

Accurate and User Friendly

The Model 3320 provides the best accuracy and precision on the market today. By automating the test process through its menu driven display, the Model 3320 eliminates user and repeatability errors, resulting in superior performance. The instrument's two-line display provides test results, user prompts, error messages, and self-diagnostics. Its computer interface allows you to analyze and collect data for reporting.

Versatile

The Model 3320 is also equipped with several other features to adapt to your needs including: results recall (up to the last 30 tests), multi-language operation, diagnostic checks, password lock-out, and on-board statistical analysis.

Simple Construction and Compact Design

The Model 3320 utilizes a solid state cooling assembly, eliminating the maintenance necessary with liquid cooling baths. Its simple construction allows for rapid on-site diagnostics; with proper cleaning and care your 3320 will be maintenance-free.

Its ergonomic design with built-in accessory compartment maximizes available bench space. Only 14 inches of bench space is needed.

After-Sales Support

Advanced Instruments Hot-Line® Service and worldwide distributor network provides comprehensive customer service and technical support, 24 hours a day, seven days a week.



**ADVANCED
INSTRUMENTS, INC.**

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

ADVANCED® FREEZING-POINT OSMOMETERS
THE BRAND OF CHOICE FOR
OSMOLALITY TESTING™



**ADVANCED®
MODEL 3320
SINGLE-SAMPLE MICRO-OSMOMETER**

Osmometry, a measurement of osmolality by the freezing-point method, is an important diagnostic method used in hospital, pharmaceutical, and environmental research laboratories.

Operating the Advanced Model 3320 Micro-Sample Osmometer is fast and easy. Once the sample has been aspirated into the sampler tip, simply place the sampler into the instrument's cradle. Push the cradle forward —testing begins automatically. Results are displayed in 60 seconds.



Advanced Instruments also supplies ControLine™ calibrators, controls, and reference solutions for osmometers.

ControLine™ Products:

- ◆ Clinitrol™ 290 Reference Solution
- ◆ Protinol™ Protein-Based Controls
- ◆ Renol™ Urine Osmolality Controls
- ◆ Linearity Osmolality Controls

Other osmometers available:

- ◆ Advanced Model 2020 Multi-Sample Micro-Osmometer
- ◆ Advanced Model 3250 Single-Sample Osmometer
- ◆ Advanced Model 3900 Multi-Sample Osmometer

Optional Accessories:

- ◆ **Barcode Scanner**
The 3320 optional barcode scanner attaches to the instrument, providing positive sample identification and minimizing transcription errors.
- ◆ **Parallel Printer**



For more information, please contact Advanced Instruments or your local distributor.

Available from:

Model 3320 Single-Sample Micro-Osmometer Specifications

Sample Volume	20µL
Test Time	60 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 ±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; ±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
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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	14" H x 14" W x 15" D (35.5 cm x 35.5 cm x 38.1 cm)
Net Weight	13.4 lbs. (6.1 kg)
Shipping Weight	25 lbs. (11.4 kg)
Warranty	One-year limited warranty on workmanship and all parts except glass, plastic, and parts warranted by their makers
Certification	   
¹ Reference 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

Hot-Line® Technical Service
Advanced Instruments Hot-Line® Service and worldwide distributor network provide comprehensive customer service and technical support, 24 hours a day, seven days a week.
For more information on Advanced Instruments family of tests, please call 800-225-4034.

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