

Advanced® Model 3900 Multi-Sample Osmometer

Walk-away Osmometry

The Advanced Instruments Model 3900 Multi-Sample Osmometer is designed to automate testing for laboratories processing moderate to high volumes of samples. By using the industry-preferred method of freezing point technology for an accurate determination of total concentration, combined with continuous throughput, the Advanced Model 3900 will provide your laboratory optimal efficiency – easily, accurately, and reliably.

Applications

- Clinical medicine
- Medical research
- IVD test development
- Bio-pharmaceutical monitoring and process control
- Pharmaceutical Research & Development
- Cell culture and bacterial fermentation
- Industrial monitoring and Quality Control

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

 **ADVANCED
INSTRUMENTS, INC.**

Maximize productivity

The Advanced Model 3900 Multi-Sample Osmometer tests up to 30 samples per hour unattended, allowing laboratory personnel more time to focus on other responsibilities.

Flexible reporting capabilities

The 3900 offers a full range of data handling capabilities with an on-board printer and connects easily to an optional barcode scanner. The barcode scanner provides positive sample identification, while minimizing transcription errors.

Automatic calibration

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

STAT capability

Testing can be interrupted at any time to process priority samples.

Low maintenance

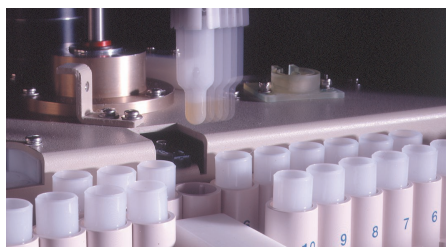
A frost-free cooling chamber eliminates routine maintenance. In addition, the 3900 sample probe is cleaned between each test to eliminate carry-over.

Worldwide support

Advanced Instruments Hot-Line® Service and worldwide distributor network provide comprehensive customer service and technical support 24 hours a day, 7 days a week.

*Fully automated
with continuous throughput*





The Model 3900 moves samples using a continuous throughput processing method.

The 3900 optional barcode scanner attaches to the instrument, providing positive sample identification and minimizing transcription errors.



Advanced Instruments also supplies a full line of calibration standards, Control Line™ products and reference solutions to ensure optimal system performance and accurate test results.

Other osmometers available:

- Advanced® Model 2020 Multi-Sample Micro-Osmometer
- Advanced® Model 3250 Single-Sample Osmometer
- Advanced® Model 3320 Single-Sample Micro-Osmometer

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

Available from:

Model 3900 Multi-Sample Osmometer Specifications

Sample Volume	0.2 to 0.3 mL (glass or disposable plastic tubes)
Test Time	90 seconds per sample (typical)
Sample Throughput	Approximately 30 samples per hour at 23°C (73°F); less at higher ambient temperature and in high range
Sample Capacity	Up to 30 samples at one time, continuously reloadable
Units	mOsm/kg H ₂ O
Resolution	1 mOsm/kg H ₂ O
Range	Low: 0 to 1550 mOsm/kg H ₂ O High: 1450 to 4000 mOsm/kg H ₂ O
Communications	On-board printer, DTE EIA-232/V.24 (RS-232) serial port, and optional barcode scanner




Performance at Reference Conditions¹

Linearity	Low Range: Less than ±0.5% from a straight line between 0 and 1500 mOsm/kg H ₂ O High Range: Less than ±1.0% from a straight line between 1500 and 4000 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 4000 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	Low Range: 18°C to 35°C (64°F to 95°F) High Range: 18°C to 30°C (64°F to 86°F)
Humidity	5 to 80% relative humidity (non-condensing)
Storage Temperature	-40°C to +45°C (-40°F to +113°F)
Electrical	
Voltage	100 to 130 VAC (50/60 Hz) or 200 to 250 VAC (50/60 Hz)
Power Consumption	350 Watts
Dimensions	54.6 cm x 54.6 cm x 50.8 cm (21.5" H x 21.5" W x 20.0" D)
Net Weight	30.0 kg (66.0 lbs.)
Shipping Weight	47.7 kg (105.0 lbs.)
Warranty	One-year limited warranty on workmanship and all parts except glass, plastic, and parts warranted by their makers
Certification	  
¹ Reference Conditions	20°C to 25°C (68°F to 77°F); 40 to 60% Relative Humidity; tolerances of reference or calibration solutions excluded Specifications subject to change

Advanced Instruments, Inc. and its subsidiaries, Spiral Biotech and Delta Instruments, design and manufacture instrumentation for clinical, pharmaceutical, biotechnology, microbiology and food laboratories around the world. Our products help healthcare companies improve the quality of care and industrial companies enhance quality and productivity.

The management system governing the manufacturing of this product is ISO 9001:2000 and ISO 13485:2003 certified.

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