OsmoPRO® MAX





OsmoPRO® MAX

Do more with less.

Osmolality testing for clinical labs just got easier.

ADVANCED INSTRUMENTS®

The OsmoPRO MAX advantage

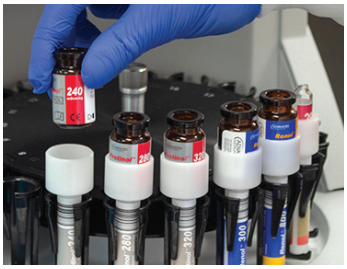
Improve efficiency with continuous loading and direct sampling from primary tubes.

Today, clinical laboratories like yours face increasing demands and fewer resources. That's why Advanced Instruments designed the OsmoPRO MAX.

The OsmoPRO MAX takes ease-of-use and efficiency to new levels. Suited for laboratories of all sizes, the OsmoPRO MAX revolutionizes osmolality testing with innovative flow-through technology. The technology eliminates the need for consumables by pipetting samples directly from primary tubes and performing testing and cleaning within the device. What's more, continuous loading and unloading removes the need to batch test. With OsmoPRO MAX, your staff can quickly begin a test and walk away.

Experience unparalleled automation, workflow flexibility, and data management combined with the gold-standard freezing point depression method to measure osmolality. The OsmoPRO MAX frees your staff to focus on other priorities while delivering the accurate and timely results clinicians need.





Proven track record

The OsmoPRO MAX is backed by more than 65 years of applied technology and expertise in freezing point osmometry as well as industry-leading performance.

Automated pipetting
Eliminate errors and simplify osmolality testing for your staff by removing manual pipetting from your workflow.

Programmable replicate testing
Walk away while the OsmoPRO MAX performs replicate measurements from the same primary tube.

Continuous loading
Flow-through technology allows users to continuously load samples in their primary tubes to minimize workflow interruptions and improve turnaround times.

Minimal user intervention
Perform 500 tests before system fluid replacement is needed. Animations guide users through simple maintenance steps.

STAT sample testing
Test urgent samples in their primary tubes even when the turntable is full.

Simple to use
A color touchscreen and intuitive user interface enable staff of varying skill levels to operate the device.

Built for today's clinical laboratory —

Unmatched capabilities, efficient design.

Fluid management system

Ready-to-use system fluid automates cleaning between samples for up to 500 tests

User-friendly touchscreen and video instruction

A color-coded, interactive operating system offers intuitive navigation and multi-language capability. Onboard video instruction guides users through simple cleaning, maintenance, and calibration workflows.



Space-saving design

Small instrument footprint requires minimal bench space

Automated pipetting system

Liquid level detection facilitates primary tube sampling and eliminates manual pipetting

Integrated barcode scanners

An integrated barcode scanner automatically scans the primary sample turntable to determine the number of samples present and their barcode IDs to prevent sample mix-ups, reduce transcription errors, and facilitate sample traceability. A second scanner recognizes employee badges as well as calibration and controls kits for user and lot traceability.



Flexible data management

Ethernet and USB ports offer multiple options for data export

Primary tube turntable

Continuously load and unload a variety of primary tube sizes

Industry-leading data management

Built for your workflow.

Onboard quality control

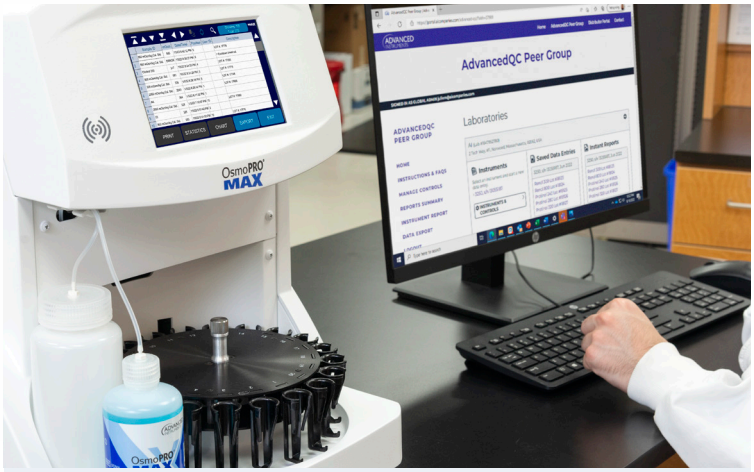
- Automatic upload capability to the AdvancedQC™ online peer group program
- Onboard Levey-Jennings control charts for statistical monitoring of daily QC
- Lock-out capability enables supervisors to require passing QC before sample testing

Real-time alerts

- Status indicator enables users to see if QC testing has been performed successfully
- Alerts for out-of-range quality control alleviate the burden on lab staff

Robust and secure data management and storage

- Two-level user access with supervisor-defined permissions
- Sample IDs, password-protected user IDs, and LOT recording enable result traceability
- Searchable database of up to 1,000 test records and 10,000 events
- Easily export results to your laboratory information system (LIS), a USB, or an optional printer to eliminate transcription errors and minimize paperwork



Automatic peer group upload

OsmoPRO MAX automatically transfers quality control data to the AdvancedQC™ Peer Group Program. Advanced Instruments' web-based program allows your laboratory to compare your results for the manufacturer-recommended Protinol™ Protein-Based Controls and Renol™ Urine Osmolality Controls with other laboratories in real-time and on a monthly basis. These capabilities enable you to monitor QC trends and quickly spot shifts in instrument performance.

A tradition of quality and innovation

Built on a history of quality, performance, and reliability, Advanced Instruments clinical osmometers are workhorses in the field. The OsmoPRO MAX is intelligently designed to help your busy laboratory do more with less, delivering a new level of automation, ease of use, and workflow flexibility. The device accommodates varying staff skill levels and takes walk away osmolality testing to a new level.

Workflow Optimizations

- Onboard video instructions
- Primary tube testing
- Automatic sample identification
- Badge scanning capability
- Programmable replicate testing
- STAT testing & load more capability
- Continuous loading and unloading
- Automatic testing
- Automatic cleaning between samples
- Multi-sample capability
- Multi-language touchscreen display
- Integrated barcode scanners

Quality Control Features

- Primary vial control testing*
- Real-time QC status indicator
- QC data upload to peer group program
- Out of specification QC alert capability

Data Traceability, Security and Flexibility

- Sample ID traceability
- User traceability
- Two-level, password protected user access
- Onboard results & events storage
- Ethernet for LIS connectivity
- Multiple USB connections

*With AI-branded controls



" Primary tube sampling is valuable because it reduces errors associated with pipetting from a labeled sample into an unlabeled tube. "

WellStar Kennestone Hospital
Technical Supervisor,
Greg Caruso

Minimal calibration and maintenance

OsmoPRO MAX arrives factory calibrated. The instrument is designed to be powered on 24/7 to maximize uptime. The OsmoPRO MAX requires minimal maintenance; users simply replace the system fluid once every 500 tests. Onboard video guidance provides simple calibration and maintenance instructions designed to increase confidence across shifts.

Parts and supplies

Part number	Product description
Instrument	
OsmoPRO MAX	OsmoPRO MAX Automated Osmometer
Calibration standards, reference solutions and testing supplies	
SKC-PRO MAX	**Convenience Kit includes:** • OsmoPRO MAX Calibration Set (3MA552) x 2 • OsmoPRO MAX Maintenance Kit (MAX500) • OsmoPRO MAX Small Volume Inserts, package of 100 (552923) • Clinitrol™ 290 Reference Solution, 10x2 mL (3MA029) • Osmolality Linearity Set, 2mL (3MA002) • Protinol™ Protein-Based Controls (3 levels, 3 mL vials) (3MA028) • Renol™ Urine Osmolality Controls (2 levels, 3 mL vials) (3LA085 • OsmoPRO MAX Enzymatic Cleaning Kit (552755) x 3
Optional accessories	
135022	Compatible dot matrix printer and cable
AN2TP5	Printer paper
700056	Compatible external barcode scanner
552921	OsmoPRO MAX Tubes, package of 250



Specifications[1]

Sample type	Serum, plasma, urine
Measurement principle	Freezing point depression
Minimum required sample volume	190 µL
Sample capacity	Continuous loading of up to 500 samples
Resolution	1 mOsm/kg H_2O
Range	0 to 2000 mOsm/kg H_2O
Accuracy[2]	Mean value ±2 mOsm/kg H_2O from nominal value between 0 and 400 mOsm/kg H_2O (1 SD) Mean value ±0.5% from nominal value between 400 mOsm/kg H_2O and 1500 mOsm/kg H_2O (1 SD) Mean value ±0.75% from nominal value between 1500 and 2000 mOsm/kg H_2O (1 SD)
Precision[2]	Standard deviation ≤2 mOsm/kg H_2O between 0 and 400 mOsm/kg H_2O Coefficient of variation ≤0.5% mOsm/kg H_2O between 400 and 1500 mOsm/kg H_2O Coefficient of variation ≤0.75% mOsm/kg H_2O between 1500 and 2000 mOsm/kg H_2O
Display	Touchscreen with onboard video instructions
Memory capacity	1,000 results/10,000 events
Temperature effects[3]	Less than 1 mOsm/kg H_2O per 5°C (9°F) ambient temperature change
Communication	USB 2.0 Type A ports (3) USB 2.0 Type B port (1) Ethernet 10/100, RJ45 connector port (1) Printer (optional)
Supported languages	Chinese, Czech, Danish, Dutch, English, French, German, Italian, Japanese, Korean, Portuguese, Spanish, Swedish
Storage temperature	-40°C to +45°C (-40°F to +113°F)
Electrical voltage	100 to 240 VAC (50/60 Hz)
Power consumption	60 Watts
Dimensions (DxWxH)	14" (36 cm) W x 16.5" (42 cm) D x 18" (46 cm) H
Net weight	13.6 kg (30 lb)
Shipping weight	20.9 kg (46 lb)
Warranty	One-year limited warranty on workmanship and parts

1. Specifications subject to change
2. Accuracy and precision (within run) specifications apply to Advanced Instruments standards and reference solutions. Performance at Reference Conditions: 20°C to 25°C (68°F to 77°F); minimum of 30% relative humidity.
3. Operating Conditions: Temperature 18°C to 35°C (64°F to 95°F); 5 to 80% relative humidity (non-condensing)

Optimal performance requires quality test supplies.

Advanced Instruments provides a full line of calibration standards and controls. These supplies ensure optimal system performance and accurate test results.



ADVANCED INSTRUMENTS®

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MP00152 Rev 5

Request a quote or demo: aicompanies.com