

With a trusted and powerful suite of advanced clinical solutions



## Comprehensive Solutions Designed with Your Lab in Mind

Clinical labs worldwide have relied on Advanced Instruments' best-in-class products for more than 65 years to provide high-quality results supplied in complete solutions that optimize workflows. Our clinical lab products are uniquely designed with gold-standard technology and intuitive user design to provide unparalleled efficiency without sacrificing performance. With Advanced Instruments by your side, you can confidently promise and deliver the timely results that physicians need, every time.



#### **Clinical Chemistry**

- Premium, reliable suite of osmometers with the most efficient and reliable workflows
- Reliable, accurate neonatal bilirubin testing for labs of any size physician offices to hospitals



#### **Clinical Microbiology**

 Streamlined bacterial growth in a fast and flexible anaerobic and microaerophilic jar system



#### **Hematology**

 Consistent, quick spinal fluid cell counting with accuracy even at low cell counts with linearity down to 0 cells/µL



#### **Volume Verifications**

 Precise and standardized pipette and operator performance to generate reliable data for every sample dispense

Delivering results quickly and routinely is essential to effectively guide physician decisions. Advanced Instruments offers services to ensure instrument uptime through effective training and valuable service agreements. Our validation and reporting services get you running and keep you running with added help in meeting regulatory guidelines. Advanced Instruments is committed to providing you with the services, training and tools to confidently deliver consistent results.



#### **Advanced Care Service Agreements**

- Reduced unplanned expenses to keep you on budget
- Maximized instrument performance and uptime with 100%-certified service experts
- · Available for all products

#### **Validation Services**

- Available for osmometers and GloCyte®
- Certification of osmometer validation to help meet regulatory guidelines (CAP and CLIA)
- Maximized warranty and reduced transition time

#### **Installation and Training Services**

- Available for all products
- Thorough installation and team onboarding to get testing started sooner
- Comprehensive virtual or on-site training for increased test confidence and productivity

#### **Linearity Reports**

- Verified osmometer and GloCyte analytical measurement range (AMR)
- Inspector-ready reporting with analytical services that meet CAP and CLIA guidelines

## Reliable and Flexible Clinical Chemistry

Speed and accuracy of your clinical chemistry results enable physicians to quickly diagnose and institute appropriate patient care. This impacts not only the lives of the patients, but the effectiveness of your healthcare organization. Advanced Instruments has long delivered dependable instruments, including our osmometers and bilirubinometer, designed with efficient workflows that help you deliver results to improve both patient care and health-care costs for medical institutions of any size, in any setting.

- Rely on a trusted and dependable brand used throughout clinical labs worldwide
- · Trust your results and maintain regulatory compliance with accurate and reliable data
- Maintain efficient and easy to use workflows with instruments designed for 24/7 use with minimal intervention

## The importance of manufacturer recommended osmolality controls

The right controls matter. Stable controls with a range of concentrations are essential to ensure consistent instrument performance and meet regulatory guidelines that recommend running multiple controls at different concentrations daily. Our controls are specifically designed to verify instrument performance at clinically relevant osmolality levels and offer the tightest ranges amongst commercially available control solutions. As an added bonus, you will be able to see how your instrument is performing compared to those in other labs using our free AdvancedQC™ online peer group program.

#### Protinol™ Protein-Based Controls

- For serum and plasma testing
- •Three clinically relevant levels: 240, 280, and 320 mOsm/kg H<sub>2</sub>O

#### **Renol™ Urine Controls**

- For urine testing
- •Two clinically relevant levels: 300, and 800 mOsm/kg H<sub>2</sub>O

#### With Advanced Instruments, you can have everything you need to deliver accurate patient results.

Work with the team that sets the standard for delivering dependable medical lab instruments, forward thinking educational resources, and responsive support services.

Learn more about Advanced Instruments clinical solutions by visiting www.aicompanies.com/clinical



## **Best-in-class Clinical Osmometers**

Lab staff and physicians value the fast, accurate results they receive from our industry leading osmometers. Each model delivers quick test times and onboard storage of 1,000 results to reduce the time to result and reporting. The burden on your team is further minimized through robust data storage, easy reporting, rigorous audit trails and infrequent need for calibration. With testing based on gold-standard freezing point depression, our products ensure accurate measurement of all osmotically active substances in your samples. And, instruments ranging from single-sample to automated multiple-sample allow you to choose the best configuration for your team. You'll quickly see why Advanced Instruments is the leader in osmolality testing with 97% of US CAP accredited labs currently using our osmometers.<sup>1</sup>







	Osmo1® Single-Sample Micro-Osmometer	OsmoPRO® Multi-Sample Micro-Osmometer	OsmoPRO® MAX Automated Osmometer
Automated Pipetting	-	-	$\checkmark$
Automated Cleaning	-		
Sample Capacity	Single Sample	Up to 20 Samples	Continuous Loading of Up to 500 Samples
Minimum Sample Volume	20 μL	20 μL	190 µL

<sup>1.</sup> CAP C-A 2021 Survey.

## **Advanced Bilirubin Testing**

Bring total and direct bilirubin testing to your lab no matter the size or configuration: pediatric physician offices, satellite labs, hospital stat labs, or pediatric research laboratories. Our CLIA-classified moderately complex test option provides fast and accurate results in a small and simple format. You can rely on accurate results through spectrophotometric analysis with a modified version of the proven Malloy-Evelyn method.



## **BR2 Bilirubin Stat-Analyzer™**\*



- · Total and direct bilirubin levels in neonates
- 30µL serum or plasma sample
- · Compact, portable and easy to use

\*The Advanced BR2 Bilirubin Stat-Analyzer is only sold in the United States.

## The value of osmolality testing

Osmolality is a simple test to help evaluate and monitor the effectiveness of treatments in conditions that affect a patient's water balance. Results may indicate low sodium levels (hyponatremia), the presence of toxins, or the patient's ability to produce and concentrate urine. This quick and effective test is also used to monitor osmotically active drug therapies such as mannitol, which is used to treat cerebral edema. Physicians worldwide recognize the power of osmolality testing to make more informed patient decisions.

Visit our website for a variety application notes highlighting the benefits of this important test.

## **Efficient and Consistent Microbiology**

Ensure patients are treated rapidly with workflows that reduce test times, ensure a stable environment and save money. The Anoxomat® III streamlines your workflow and improves quality by allowing you to easily create exact, repeatable environments. The Palladox® Disposable Sachet further simplifies your anaerobic sample testing by ensuring consistency of growth and minimizing catalyst handling time. This flexible, simple solution provides your lab with:

- Faster results through a streamlined, easy-to-use workflow in a stable environment
- · Reliable testing with optimal conditions for consistent growth and built-in safeguards
- · Lower costs through affordable products and fewer retests
- Quality assurance with built-in tests and flexible reporting options

These products provide the perfect solution to improve workflow efficiency, eliminate downtime and simplify anaerobic testing. Their flexible and easy-to-use formats keep clinical microbiology labs productive and ready to culture a wide range of microbes.



## **Anoxomat III Anaerobic Jar System**

- Automatic quality control system to ensure a stable environment
- Two-button start with minimal training required
- Anaerobic, microaerophilic, and custom growth environments established in minutes



#### **Palladox Sachets**

- Easy-to-use, single use catalyst for up to 12 plates
- Pre-activated with less palladium for less waste
- · Can be used for sample holding and incubation
- · Long shelf life up to 2 years



## **Automated Hematology**

Confidently handle cerebrospinal fluid (CSF) specimens with automation for all cell counts in one instrument. The GloCyte Automated Cell Counter for CSF relies on specific staining to accurately and quickly report counts – even in samples with clinically relevant low cell counts that fall below the linearity of other automated analyzers.

- Improved turnaround time and increased tech productivity with automated counting
- Reduced tech and shift variability with accuracy at even the lowest cell counts
- Adherence to regulatory guidelines with timestamped results and user traceability
- Improved result consistency and turnaround time compared to the manual hemocytometer method



## **GloCyte Automated CSF Cell Counter**

- Linearity down to 0 cells/µL eliminates the need for manual counts
- TNC and RBC results in under 5 minutes
- Sample volumes of 60 µL or less
- · Intuitive software to guide user through testing

## The Advanced Instruments Advantage

Our customers continue to choose Advanced Instruments as their first choice for dependable and accurate clinical lab equipment. Advanced Instruments strives to always supply reliable instruments, high-quality consumables and excellent service helping labs like yours succeed. Contact us through our website to learn more about how we can help you provide confident and accurate results in an efficient workflow, every time.

# Check pipette performance with the Artel PCS® and ArtelWare® Software

Pipettes are the most frequently used instruments in the laboratory. Their performance is key to every sample dispense and dilution, and is critical for generating reliable data. The PCS provides confidence in data integrity with scheduled pipette calibrations, interim performance verifications, complete documentation and pipette inventory management, it's an ideal tool for standardizing pipetting technique and assessing operator competency.



#### ideal for.

- Verifying the accuracy and precision of handheld pipettes for volumes from 0.1  $\mu L$  to 5,000  $\mu L$
- Assessing and documenting operator competency
- Managing pipette QC and inventory
- Complying with regulatory requirements
- Uploading calibration certificates and repair documentation, as well as summary statistics for pipettes calibrated outside of ArtelWare



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MP00149 Rev 3

## Easy verification with documentation in less than 3 minutes



1. Identify pipette



2. Scan pipette



3. Scan calibration solutions



4. Dispense samples

Pipette	ART-101		Re	Result		PASSED	
Model	Gilson Pipetman P20		Con	Completed		6/28/2016 1:41:57 PM	
Serial Number			,	Method	Example	Plan, Version 1	
Nominal Volume	20.0000 µL		Calibra	Calibration ID		20160628134038ART-101	
Owner	Artel Marketing	(Artel)					
Location	Sample Location						
/olume	Mean	Uncertainty	Inaccuracy	Tole	rance	Imprecision	
20.00 μL	20.034 uL	1.45 %	0.17 %	5.00		1.61 %	

5. Obtain report