NEW from Reichert
Smart Instruments. Modular Connections. Powerful Systems.

Connect the new Reichert density meters, *Density5* and *Density4*, to the new *AR9 and AR5* refractometers, and to Reichert's new polarimeters, *Polar2* and *Polar3*, to create powerful analytical systems that perform all of your requirements.

Advantage Reichert
AR Series of Refractometers

Continuing its record of leadership in refractometry, Reichert introduces two new refractometers to the *Advantage Reichert AR Series* adding to its line of sophisticated benchtop analytical instruments. These new instruments, the *AR9* and the *AR5* are reliable, durable, accurate and tough enough for the most demanding applications. The *AR9* is precise, having the capability to provide measurements for the most critically regulated industries. Both the *AR9* and *AR5* offer Peltier temperature control at an attractive price, while providing the connectivity and flexibility inherent in all of Reichert's new products.

Refractometer *AR9*
Exceptional accuracy
to 5 decimal places

Refractometer *AR5*
Exceptional accuracy
to 4 decimal places

AR9 and *AR5 AR Series* Refractometers Advantages
- Exceptional accuracy and reproducibility
- Flexible, modular – easily connects to Reichert *Density5* and *Density4* meters and Reichert polarimeters, *Polar2* and *Polar3*, for additional measurements
- Powerful software interface, compliant with critically regulated industries
- Continuous reading mode / real time measurement
- The *AR9* has a YAG (Yttrium Aluminum Garnet) prism in stainless steel well, providing durable maintenance-free optics. The *AR5* has a sapphire prism.
- Extremely low noise
- Built-in solid state Peltier thermostat for accurate temperature control
- Modern, robust design is easy to clean and simplifies service
- Sample temperatures up to 100°C
- Easy to calibrate
- Remote diagnostics and maintenance of data

Polar1, *Polar2* (coming in 2016), *Polar3* Polarimeters
High Quality. Modular. User-friendly.

The new modular circular polarimeters from Reichert *Polar1*, *Polar2* and *Polar3*, are designed for analyzing optically active substances. These new robust instruments provide highly precise, accurate results over a particularly wide measurement range. The Reichert polarimeters are easy to use and are suited to perform in many industries including the beverage, cosmetic, chemical, food, pharmaceuticals, and fragrance sectors determining concentration and purity analysis.

Reichert *Polar1*

Reichert *Polar2* (coming in 2016)

Reichert *Polar3*

Reichert Polarimeter Advantages
- Maintains accuracy over entire measurement range
- Exceptional high-quality analysis
- Flexible, modular – easily connect to Reichert *AR9* refractometer and density meters, *Density5* and *Density4*
- Built-in Peltier thermostat
- Ready for all applications
- High-resolution 7" TFT touchscreen
- Energy saving LED light source
- Compliant with international standards, GLP/GMP conformity and 21 CFR Part 11 ready

Reichert®
T E C H N O L O G I E S
Analytical Instruments

AMETEK®
ULTRA PRECISION TECHNOLOGIES

NEW   Reichert Density Meters

Powerful Instruments from Reichert
Measure Everything. Accurately. Quickly. Easily.

Reichert®
T E C H N O L O G I E S

Reichert
Established Leadership.
Longstanding Innovation.

Reichert Technologies, a company that has created advanced optical and analytical instruments for more than 150 years, continues to pursue the highest level of accuracy and quality today with its expansion and introduction of three high-end instruments, the Reichert AR Series of Refractometers, Density Meters, and Polarimeters. A modular system, these new instruments deliver connectivity and flexibility. Separately or simultaneously they measure refractive index, density, and optical activity determining the concentration and purity of numerous substances. The new instruments are accurate and robust in obtaining critical measurements sought in quality control analysis or sophisticated R&D investigations.

NEW!
Density Meters
Accurate.
Quick.
Easy.

The new *Density5* and *Density4* meters continue Reichert's tradition of providing robust and reliable analytical instruments for the needs of many industries. With the push-of-a-button these instruments provide accurate density measurements of liquids for analysis and quality control. Condensed into a compact, robust, stand-alone unit these density meters are reliable workhorses for the laboratory, resisting damage from demanding applications. Part of the Reichert flexible modular system, these density meters easily combine with Reichert's new *AR Series* refractometers, *AR9* and *AR5*, and polarimeters, *Polar2* and *Polar3*, for the simultaneous determination of measurements. These out-of-the-box instruments are ready to meet the requirements and demands of all applications in the same lab.

Reichert Density Meters Measure All Industries

- Beverage and Breweries
- Chemical
- Cosmetics
- Essential Oils
- Food
- Fragrance
- Manufacturing and Industrial
- Pharmaceutical
- Petroleum

Density5 and *Density4* Meters

The new density meters are rugged, sealed, single-piece instruments designed for continuous density measurements across a wide range of applications. The *Density5* meter measures with results accurate to 5 decimals places and the *Density4* is accurate to 4 places. An intuitive, user-friendly operating system and the large, color touchscreen interface reduce setup time. Backed by Reichert's longstanding knowledge in the analytical instruments industry these instruments are manufactured for reliability and longevity in your lab.

Reichert *Density5* and *Density4* Advantages

- *Density5* exceptional accuracy to 5 decimal places
- *Density4* exceptional accuracy to 4 decimal places
- Easiest measurement module exchange for the most productivity and lowest maintenance
- Robust single-piece system
- Compact size, low weight
- Flexible, modular – easily connects to Reichert's new *AR9* and *AR5* refractometers for additional measurements

- Built-in solid state Peltier thermostat for accurate temperature control
- Continuous density measurement / real time measurement
- Integrated reference oscillator
- Automatic air bubble detection
- Color 3.5" touchscreen
- USB and RS232 connectivity
- Powerful software interface, compliant with critically regulated industries, update onsite

Technical Specifications

	Density5		Density4
Measuring range	0-3 g/cm³		
Temperature range	5-95°C Peltier thermostat		
Pressure range	0-10 Bar (0-145psi)		

Density

Accuracy	0.00005g/cm³		0.0005g/cm³
Resolution	0.00001g/cm³		0.0001g/cm³
Reproducibility	0.00002g/cm³		0.0002g/cm

Temperature

Accuracy	0.03°C		0.05°C
Reproducibility	0.01°C		0.02°C

Minimum sample amount	2ml		
Measuring time per sample	< 30sec.		<10sec.
Filling	Injection		
Interfaces	USB and RS232		
Compliancy	European and American Pharmaceutical, GMP/GLP and 21 CFR Part 11, ATSM, ISO and DIN standards		
Dimensions	12.5 x 9.25 x 8.5 inches (320 x 235 x 218mm)		
Weight	22 lbs. (10 kg)		

Reichert Density Meter Operating System Software

The operating system (OS) software has been designed with the user in mind. The intuitive touchscreen navigation saves time when defining settings or changing methods. The OS can easily connect the Reichert *Density5* and the *Density4*, to the *AR Series* refractometers, *AR9* and *AR5* and polarimeters, *Polar2* and *Polar3* making your lab ready for all applications. This powerful software makes the instruments part of your workflow communicating with LIMS systems and other laboratory instruments simply via USB or RS232. Programmed in the Universal Display, the software can operate up to five measurement modules. Combine the OS with the optional GxP software package, to provide full compliance with 21 CFR Part 11 meeting all security electronic records requirements for the pharmaceutical industry.

Advantages of Reichert Operating System Software

- Customize easily to fit your workflow and maximize efficiency
- Intuitive interface guides user through menu
- Quick set-up of specific measurement scales
- Storage for more than 1,000 products including up to 1,000 methods
- Context sensitive help
- Password protected administration and user profiles
- Evaluate and calculate displayed values and data
- Easy to calibrate
- Traceability of all calibration procedures
- Export interface to MS Excel, Text file or PDF
- Quick reset to factory defaults
- Quick reset to user specific defaults
- Self-diagnostic options
- Easy service and support references
- USB interface allows upgrades at user site
- Compliant with international standards

Universal Display

- Operation system displayed on 7" color touchscreen
- Drives up to 5 measurement modules
- Program and save testing methods

GxP Software Package

- Provides compliance for 21 CFR Part 11 meeting all security requirements for critically regulated industries