

accurate

Reichert Analytical Instruments

reliable



affordable

Bench-Top Refractometers

versatile

Imagine the perfect refractometer for you.

For more information, please contact us:

ExpotechUSA

10700 Rockley Road
Houston, Texas 77099
USA

281-496-0900 [voice]

281-496-0400 [fax]

E-mail: sales@expotechusa.com

Website: www.ExpotechUSA.com

Choose from a full line of bench-top refractometers -
made and serviced in the USA by Reichert,
the leader in accuracy, ease and reliability.



For more than 50 years, Reichert has been the leader in developing technologies to improve your measuring capability. In fact, we invented the automatic refractometer, the standard by which other competitive instruments are measured.

Look over the instruments in this brochure for starters.

Then look to Reichert for help with your measurement applications.

We are happy to provide the service and support you deserve to find the instrument that is perfect for you.



AR700 Temperature Controlled Automatic Refractometer

The AR700 Automatic Refractometer features exceptional accuracy, solid state temperature control, a wide reading range, and simple and fast operation. It offers outstanding flexibility to provide accurate readings for a variety of applications, from chemical identification to purity determination to concentration measurements. The AR700 refractometer features an expanded refractive index reading range of 1.33000 to 1.60000 and Electronic Temperature Control from 10° to 100°C. It enables you to analyze a broad range of samples, from fruit juices to polymers, and eliminates the need to dedicate instruments for specific products.

AR700 Key Features

- Sapphire prism for incredible durability
- Fully automatic internally temperature controlled readings
- Peltier Temperature Control from 10° to 100° C with automatic temperature equilibration detection to ensure accurate readings
- Full Brix Range
- Refractive Index Range of 1.33000 to 1.60000
- Precision to 0.00001 Refractive Index, 0.01 Brix
- User-definable calibration points throughout the reading range ensure accuracy at every point
- Accommodates sample types that are transparent, translucent or opaque
- Simple calibration, NIST certified oils included
- Calibration History Log

AR700

Operation	Automatic, Reflected Light Refractometer
Part Number	13107000 (110 to 240V with USA Power Cord) 13107010 (110 to 240V with EU Power Cord) 13107020 (110 to 240V with UK Power Cord)
Sample Types	Transparent, Translucent, and Opaque Liquids
Reading Range	1.33000 to 1.60000 Refractive Index Full Brix Scale per ICUMSA
Precision	±0.00001 Refractive Index, ±0.01 Brix
Calibration	Up to 5 User Definable Points Available
Temperature Control Method	Built-In Peltier System
Temperature Control Range	10 below ambient to 100 Degrees Celsius
Temperature Precision	0.01 Degree Celsius
Prism Assembly	Sapphire Prism mechanically sealed with Teflon Gasket to 416 Grade Stainless Steel Sample Well
Display	Graphic LCD Display, 4.3"W X 2.4"H (11 X 6 cm)
User Interface	Simple, Effective 5-Button Operation
I/O	2 RS232 9-pin Serial Ports
Warranty	2 Years
Software Features	Multilingual (English, German, Spanish, French), Calibration History Record, Programmable With Up to 14 Custom Scales, Password Protected Set-Up, Automatic Sample Equilibration Detection, Restore to Factory Option



versatile

AR600 Automatic Refractometer

The AR600 automatic refractometer offers superior accuracy, repeatability, and ease of use. It is ideally suited for quality assurance and research applications. It measures to 0.00001 refractive index or 0.01 % solids (Brix) and offers automatic temperature compensation. The AR600 is an easy-to-use tool for concentration measurements, purity determination and chemical identification.

AR600 Key Features

- Virtually impervious sapphire prism
- Clear, graphical LCD display
- Measures to 5th decimal place refractive index or 2nd decimal place in % solids (Brix)
- Up to 256 scans per reading
- Automatic Temperature Compensation
- Automatic Temperature Equilibration Detection reduces operator error
- Detailed calibration history record of last 512 calibrations
- Fully definable serial and parallel port for I/O

AR600

Operation	Automatic, Reflected Light Refractometer
Part Number	13106000 (110 to 240V with USA Power Cord) 13106010 (110 to 240V with EU Power Cord) 13106020 (110 to 240V with UK Power Cord)
Sample Types	Transparent, Translucent, and Opaque Liquids
Reading Range	1.32000 to 1.52000 Refractive Index Full Brix Scale per ICUMSA
Precision	±0.00002 Refractive Index, ±0.01 Brix
Calibration	Up to 5 User Definable Points Available
Temperature Control Method	Ports for External Circulator
Temperature Control Range	10 to 60 Degrees Celsius
Temperature Precision	0.01 Degree Celsius
Prism Assembly	Sapphire Prism sealed with Epoxy to 416 Grade Stainless Steel Sample Well
Display	Graphic LCD Display, 5.25"W X 3"H (13.4 X 7.6 cm)
User Interface	Simple, Effective 5-Button Operation
I/O	1 RS232 Serial Port, 1 25 pin Parallel Port
Warranty	2 Years
Software Features	Multilingual (English, German, Spanish, French), Calibration History Record, Programmable With Up to 14 Custom Scales, Password Protected Set-Up, Automatic Sample Equilibration Detection, Restore to Factory Option

affordable



AR400 Automatic Refractometer

The AR400 Automatic Refractometer provides precise concentration measurements, purity determination and chemical identification. It is ideal for applications in the food, beverage, pharmaceutical, industrial fluid, chemical, plastics and petrochemical industries.

AR400 Key Features

- Measures to fourth decimal place refractive index (0.0001) or first decimal place (0.1) in % solids (Brix)
- Patented high-sensitivity 2600 cell diode array shadowline detector is sensitive enough to read demanding samples such as inks or grape juice
- Sapphire Prism for increased durability
- Detailed calibration history record of last 512 calibrations
- Fully definable serial and parallel port for I/O

AR400

Operation	Automatic, Reflected Light Refractometer
Part Number	13104010 (110 to 240V with USA Power Cord) 13104020 (110 to 240V with EU Power Cord) 13104030 (110 to 240V with UK Power Cord)
Sample Types	Transparent, Translucent, and Opaque Liquids
Reading Range	1.3200 to 1.5200 Refractive Index Full Brix Scale per ICUMSA
Precision	±0.0001 Refractive Index, ±0.1 Brix
Calibration	Up to 3 User Definable Points Available
Temperature Control Method	Ports for External Circulator
Temperature Control Range	10 to 60 Degrees Celsius
Temperature Precision	0.1 Degree Celsius
Prism Assembly	Sapphire Prism sealed with Epoxy to 416 Grade Stainless Steel Sample Well
Display	Graphic LCD Display, 5.25"W X 3"H (13.4 X 7.6 cm)
User Interface	Simple, Effective 5-Button Operation
I/O	1 RS232 Serial Port, 1 25 pin Parallel Port
Warranty	2 Years
Software Features	Multilingual (English, German, Spanish, French), Calibration History Record, Programmable With Up to 14 Custom Scales, Password Protected



accurate

ARIAS 500 Automatic Refractive Index Analysis System

The ARIAS 500 is the world's first transmitted light refractometer capable of automatic readings with precision comparable to high-end automatic reflected light refractometers. This semi-automatic refractometer eliminates the need for shadowline intersect interpretation and delivers consistently repeatable results. The ARIAS 500 compensates for temperature and delivers the results on an easy-to-read digital display with multipoint calibration ability.

ARIAS Key Features

- Software interpretation of shadowline intersect reduces operator error
- Illumination using internal 589 nm LEDs with 589 nm filter
- 1.30000 to 1.70000 refractive index range
- Reads out to 0.00001nD or 0.01% solids (Brix)
- Up to 14 custom scales can be programmed
- Operating temperature range from 10 to 80° Celsius
- Calibration from 1 to 7 points using distilled water and available NIST certified calibration oils
- Automatic Temperature Compensation between 10-40°C
- Automatic Temperature Equilibration Detection

ARIAS 500

Operation	Semi-Automatic, Transmitted Light Refractometer
Part Number	1310499SA-US (110 to 240V with USA Power Cord) 1310499SA-EU (110 to 240V with EU Power Cord) 1310499SA-UK (110 to 240V with UK Power Cord)
Sample Types	Transparent, and Translucent Liquids or Solids
Reading Range	1.33000 to 1.70000 Refractive Index Full Brix Scale per ICUMSA
Precision	±0.00005 Refractive Index, ±0.03 Brix
Calibration	Up to 7 User Definable Points Available
Temperature Control Method	Ports for External Circulator
Temperature Control Range	10 to 80 Degrees Celsius
Temperature Precision	0.01 Degree Celsius
Prism Assembly	Glass Prism sealed with Epoxy to 416 Grade Stainless Steel Housing
Display	Graphic LCD Display, 1.8"W X 1.8"H (4.7 X 4.7 cm)
User Interface	Simple, Effective 5-Button Operation
I/O	2 RS232 9-pin Serial Ports
Warranty	2 Years
Software Features	Multilingual (English, German, Spanish, French), Calibration History Record, Programmable With Up to 14 Custom Scales, Password Protected Set- Up, Automatic Sample Equilibration Detection, Restore to Factory Option

reliable



Abbe Mark II Plus Refractometer

The Reichert Abbe Mark II Plus bench-top refractometer is specifically designed to combine consistency and accuracy with high throughput. It provides digital readouts at the touch of a button and automatically compensates for temperature in the Brix reading mode. It can be used for a wide range of applications in a variety of industries including pharmaceutical, food and beverage, petrochemical and manufacturing.

Abbe Mark II Plus Key Features

- Digital readout of Refractive Index, % Solids as Brix, Temperature Compensated % Solids as Brix, and Temperature
- Electronic prism temperature measurement
- Automatic temperature compensation in Brix reading mode
- Built-in illumination system
- Focusable eyepiece
- Fast, accurate, consistent results
- Electronic data transfer capabilities via RS232 data port

Abbe Mark II PLUS Refractometer

Operation	Manual, Transmitted Light Refractometer
Part Number	13104940 (110 to 120V with USA Power Cord) 13104950 (220 to 240V with EU Power Cord)
Sample Types	Transparent, and Translucent Liquids or Solids
Reading Range	1.3000 to 1.7000 Refractive Index Full Brix Scale per ICUMSA
Precision	±0.0001 Refractive Index, ±0.1 Brix
Calibration	Single or Two-Point Calibration
Temperature Control Method	Ports for External Circulator
Temperature Control Range	10 to 80 Degrees Celsius
Temperature Precision	0.1 Degree Celsius
Prism Assembly	Glass Prism sealed with Epoxy to 416 Grade Stainless Steel Housing
Display	Digital LED Display, 2"W X 0.75"H (5.0 X 1.9 cm)
User Interface	Read and Temperature Buttons as well as 3-way Mode Selector Knob
I/O	1 RS232 Serial Port
Warranty	2 Years

versatile

More from Reichert

As a leader in refractometry, Reichert also offers a full line of rugged, durable and dependable hand-held refractometers to meet most any need. From food and beverage to chemical and industrial applications, there is a Reichert hand-held refractometer for accurate, fast and easy testing in the field.

Reichert Analytical Instruments



Hand-Held Refractometers

Imagine the perfect refractometer for you.

Reichert Analytical Instruments



Clinical and Diagnostic Instruments

Imagine the perfect refractometer for you.

The brochures shown above are also available. To receive your copy, just call us at 281-496-0900.

*The precision and accuracy of measurements are largely dependent upon operator skill, laboratory equipment, temperature control, the accuracy of calibration standards, chemical stability of sample, and the physical characteristics of the sample. A product demonstration is suggested to validate the true precision and accuracy of laboratory equipment for specific samples. Due to a policy of continuous development, we reserve the right to change specifications without notice.



Reichert products are designed and manufactured under quality processes meeting ISO 9001 requirements

For more information, please contact us:

ExpotechUSA

10700 Rockley Road
Houston, Texas 77099
USA

281-496-0900 [voice]

281-496-0400 [fax]

E-mail: sales@expotechusa.com

Website: www.ExpotechUSA.com