IRIS ANALYTICAL

POLARIMETERS & REFRACTOMETERS





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Iris Automatic Polarimeters specifically designed for the most demanding applications in pharmaceutical, chemical, food and research, optical and specific rotation, percentage of concentration, purity, percentage of inverted sugar and percentage of inversion in medicine. Better-quality usability with the use of touch screen display. Achieve a high measurement accuracy of up to ± (0.01 and measuring valuex 0.05%) °C. Automatically prints out Optical rotation, specific rotation, sugar degree, concentration. Fully automatic unit removes the need for manual modifications.

Polarimeters



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Offers a reading response that can be set to slow, where high accuracy is required and the optical density of the sample is high, where a low resolution is acceptable. Ours polarimeter comes with standard wavelength 589 nm and LED light source with power supply to reduce heat generated within the instrument. Designed with simple operation of graphically identified push button including scale and compensation selection, zero calibration and the display of optical density (OD) and temperature.The instrument can be checked and calibrated using quartz control plates by accessing the span facility in the setup menu.

Standard Automatic Polarimeter IAP-200 Series

Standard Automatic Polarimeter IAP-200 Series is designed for use in many applications that require measurement of optical rotation and best suited for optical rotation, specific rotation, and sugar degree, concentration in pharmaceutical, chemical, foods and research applications. Designed with 589 nm, color touch screen and includes polarimeter tubes of 100 mm and 200 mm, and a spare sodium lamp, with sample transmittance up to 1% range. Better-quality usability with the use of touch screen display. Achieve a high measurement accuracy of up to ± 0.01. Automatically prints out Optical rotation, specific rotation, sugar degree, concentration.



Standard Automatic Polarimeter IAP-240 *is* ideal for measurement of rotation of polarization plane and best suited for optical rotation, specific rotation, sugar degree, concentration with accuracy up to ±0.01°C, and ≤0.002°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

Standard Automatic Polarimeter IAP-260 is ideal for measurement of rotation of polarization plane and best suited for optical rotation, specific rotation, sugar degree, concentration with accuracy up to ±0.01°C, and ≤0.002°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

- Designed with photoelectric test and microcomputer control
- Suitable for specific rotation, optical rotation, sugar degree and concentration
- Maximum temperature range from 15 °C to 30 °C
- CE certified
- Designed with LED display along with interference filter
- Capabilities to store of six times results and design to calculate average values
- Integrated with polarimeter tubes of 100 mm and 200 mm
- Need no requirement to warm up before measurement
- Measurement of dark-colored sample
- Support RS232 interface and USB

Technical Specifications

Model	IAP-240	IAP-260
Wavelength	589 nm	
Accuracy	±0.01°C (-15° ?optical rotation ?+15°)	
Repeatability	0.002 °C(optical rotation)	
Temperature Accuracy	-	±0.5?
Temperature Range	-	15 to 30?
Measurement Range		
Measurement Modes	Optical rotation, specific rotation, sugar degree, concentration	
Source	LED + interference filter	
Display	Colour Touch Screen	
Test Tube	100 mm to 200 mm (regular)	
Minimum Indicating Value	0.001°C(optical rotation)	
Sample Transmittance	1%	
Certifications	CE	
Interface	RS232/USB	
Power Consumption		
Dimension	820×500×510 mm	
Weight	48 kg	
Electrical Requirement		
Catalogue No.	4601005-04	4601010-04

Basic Automatic Polarimeter IAP-100 Series

Basic Automatic Polarimeter IAP-100 Series is designed for use in many applications that require measurement of optical rotation and best suited for optical rotation, sugar degree in pharmaceutical, chemical, food and research applications. Designed with 589.44 nm, 5-inch LCD light source and includes polarimeter tubes of 100 mm and 200 mm, and a spare sodium lamp, with sample transmittance up to 10 %, and 1% range. Better-quality usability with the use of touch screen display. Achieve a high measurement accuracy of up to ± (0.01 and measuring valuex 0.05%) °C. Automatically prints out Optical rotation, sugar degree.



Basic Automatic Polarimeters IAP-110 is ideal for measurement of rotation of polarization plane and best suited for optical rotation with accuracy up to ±0.01°C, and ≤0.01°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

Basic Automatic Polarimeters IAP-120 is ideal for measurement of rotation of polarization plane and best suited for optical rotation with accuracy up to ±0.01°C, and ≤0.002°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

- Designed with photoelectric test and microcomputer control
- Suitable for optical rotation and sugar degree application
- CE certified
- Designed with 5-inch LCD display
- Capabilities to store of three times results and design to calculate average values
- Integrated with polarimeter tubes of 100 mm and 200 mm
- Support RS232 interface

Technical Specifications

Model	IAP-110	IAP-120
Wavelength	589.44 nm	
Accuracy	±(0.01+measuring value x 0.05%)°C	
Repeatability	?0.01°C	?0.002°C
Measurement Range	±45°C(Optical rotation)	±45°(optical rotation)±120°
Measurement Modes	Optical rotation	Optical rotation, sugar degree
Source	LED	
Display	5-inch LCD	
Test Tube	100 mm or 200 mm (regular)	
Minimum Indicating Value	0.002°C(optical rotation)	0.001°C(optical rotation)0.01°
Sample Transmittance	10%	1%
Certifications	CE	
Interface	RS232	
Power Consumption		
Dimension	730×480×470 mm	
Weight	33 kg	
Electrical Requirement		
Catalogue No.	4600505-04	4600510-04

Precision Automatic Polarimeter IAP-300 Series



Precision Automatic Polarimeter IAP-300 Series is designed for use in many applications that require measurement of optical rotation and best suited for custom optical rotation, specific rotation, sugar degree and concentration. Designed with 589.44 nm, 8-inch color dot matrix touch LCD and includes polarimeters tubes of 100 mm and 200 mm, and a spare sodium lamp, with sample transmittance up to 0.10% and 0.01% range. Better-quality usability with the use of touch screen display. Achieve a high measurement accuracy of up to ± 0.006, ± 0.004 ± 0.003. Automatically prints out Optical rotation, specific rotation, sugar degree, concentration.

Precision Automatic Polarimeter IAP-360 is ideal for measurement of rotation of polarization plane and best suited for optical rotation, specific rotation, sugar degree, concentration with accuracy up to ±0.006°C, and ≤0.002°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

Precision Automatic Polarimeter IAP-370is ideal for measurement of rotation of polarization plane and best suited for optical rotation, specific rotation, sugar degree, concentration with accuracy up to ±0.004°C, and ≤0.002°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

Precision Automatic Polarimeter IAP-380 is ideal for measurement of rotation of polarization plane and best suited for optical rotation, specific rotation, sugar degree, concentration with accuracy up to ±0.004°C, and ≤0.002°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

Precision Automatic Polarimeter IAP-390 is ideal for measurement of rotation of polarization plane and best suited for optical rotation, specific rotation, sugar degree, concentration with accuracy up to ±0.003°C, and ≤0.002°C total repeatability and glass tubes: 100 and 200 mm, 15mm diameter.

- Integrated with polarimeter tubes of 100 mm and 200 mm
- With high quality prisms
- Maximum temperature range from 10 °C to 50 °C
- CE certified
- Designed with 8-inch LCD display
- Improves the response speed, measurement time, and minimum transmittance while testing
- Offer high efficiency and accuracy features
- Integrated with sodium lamp
- Measure multi-point automatic calibration
- Measurement of dark-colored sample
- Support RS232 interface and USB

Technical Specifications

Model	IAP-360	IAP-370	IAP-380	IAP-390
Wavelength	589.44 nm (Sodium D Spectrum)			
Accuracy	±0.006°C	±0.004°C		±0.003°C
Repeatability	?0.002°C			
Calibration	Multi-point automatic calibration			
Frequently Used Methods	30		300	
Minimum Transmission of Samples	0.10%			0.01%
Response Speed	8°C/S			
Temperature Accuracy	-	±0.1?		
Temperature Range	-	10-50?		
Measurement Range	±90°(Rotation) ±259°Z(Sugar)			
Measurement Modes	Optical rotation, specific rotation, sugar degree and concentration (Custom)			
Source	LED			
Display	8-inch colour dot matrix touch LCD			
Test Tube	200/100 mm	200/100 mm(regular) 100 mm(temp control)		
Certifications	CE			
Interface	USB/Printer/Ethernet	USB/Keyboard/Mouse/Universal Printer/VGA/Ethernet/Optical wireless card for wireless internet		
Dimension	860×510×470 mm			
Weight	36 kg			
Electrical Requirement	-			
Catalogue No.	4601505-04	4601510-04	4601515-04	4601520-04

Refractometers

Iris Refractometer carry a numbers of models used in many applications with different instruments requirements including pharmaceutical, manufacturing industries, food and beverages industries to determine and measure the % Brix, salinity, moisture content, sugar content,°Bé, Oe, KMW, alcohol and beer content or specific gravity of translucent or clear fluids. These range from desktop units to portable refractrometer, semiautomatic and automatic, digital refractrometer with varying levels of precision and documentation.



Semi-Automatic Refractometer

Semi-Automatic Refractometer used in the manufacturing center and production line seeking to maintain a high level of quality and adherence to stringent quality procedures, allow accurate reading of data and still require some manual adjustment to handle this equipment and measuring data rely on user skill.



Semi-Automatic Refractometer ISAR-1000 Series

Semi-Automatic Refractometer ISAR-1000 Series used in the manufacturing center and production line seeking to maintain a high level of quality and adherence to stringent quality procedures, allow accurate reading of data and still require some manual adjustment to handle this equipment and measuring data rely on user skill. Provide accurate readout of the refractive index, %brix value, and temperature that display on LCD touch display. The ISAR-1000 series provide refractive index range, up to 1.30000 to 1.70000, resolution 0.00001 and brix range, up to 100 %, resolution between 0.1 and 0.01%, with temperature range 0 to 50℃ and -20 to -120℃. These refractrometer normally have RS232 and USB interface with a PC and are the instruments of choice for high-throughput labs seeking both accuracy and data integrity.



- Used in petroleum, chemical, pharmaceutical, sugar refining and food industries, as well as in related colleges, universities and scientific research institutions
- Suitable to measure Refractive index and Brix value
- Offer measuring range of 1.30000 to 1.70000 nD and 0 to 100% Brix
- Easy and portable handling
- Build-in digital display to control and show all parameters
- Provide easy calibration
- High quality strong housing materials

Automatic Refractometer

Automatic Refractometer is used to reduce differences value in measuring data between user with excellent accuracy and readout value it can used to measure refractive index and brix value of sample at different temperature.



Automatic Refractometer IAR-1000 Series

Automatic Refractometer IAR-1000 Seriesis a benchtop automatic refractrometer measure refractive index and brix value of sample at different temperature. The intensity of reflected light is determined by CCD scanner and resulting position of light or dark boundary automatically. To avoid stray light and evaporation, the sample cover is placed over the sample and Sapphire glass and hard glass contain prism. Provide accurate readout of the refractive index, %brix value, and temperature that display on touch display. The ISAR-2100 series provide refractive index range, up to 1.30000 to 1.70000, resolution 0.00001 and brix range, up to 100 %, resolution 0.01%, with temperature range 0 to 50℃.



- Used oil industry, pharmaceutical industry, paint industry, food industry, daily chemical industry, sugar industry, geological exploration or institutions
- With Measuring Prism made up of sapphire glass and hard glass
- Provide protection anti-corrosion
- Reduced chance of error by using CCD sensor
- 7 inch color touch screen light source
- Automatic Temperature Compensation(ATC)
- Comes with RS232/USB/SD card interface

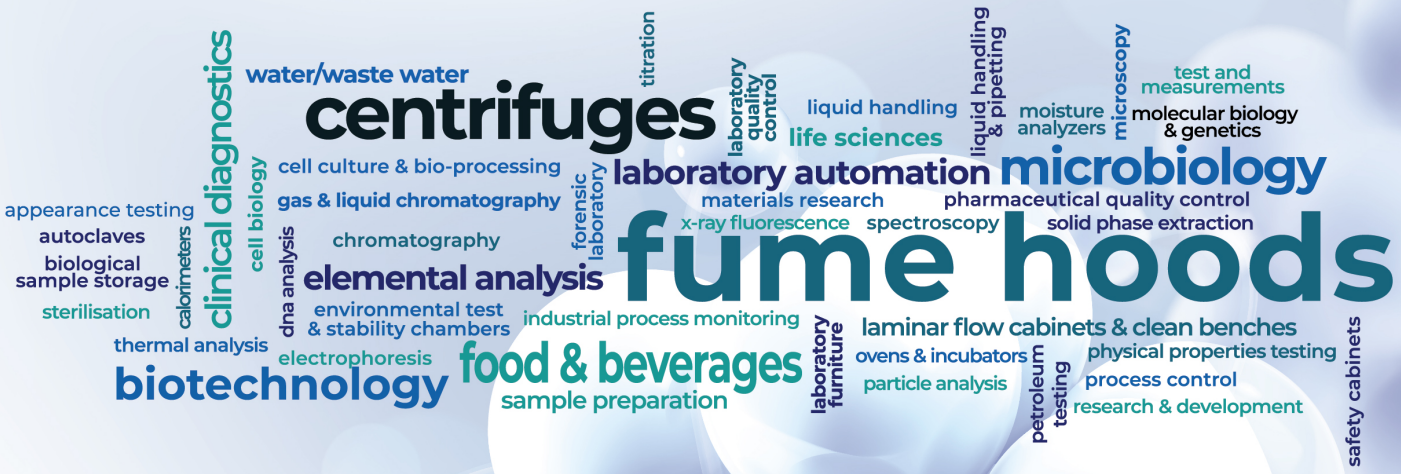
Automatic Refractometer IAR-2000 Series

Automatic Refractometer IAR-2000 Seriesis used to reduce differences value in measuring data between user with excellent accuracy and readout value it can used to measure refractive index and brix value of sample at different temperature. The IAR-2200 is equipped with LED light source which replace the tungsten because of their exceptionally durability of 100, 000 hours. The intensity of reflected light is determined by CCD scanner and resulting position of light or dark boundary automatically. To avoid stray light and evaporation, the sample cover is placed over the sample and Sapphire glass and hard glass contain prism. The ISAR-2200 series provide refractive index range, up to 1.30000 to 1.70000, resolution 0.00001 and brix range, up to 100 %, resolution 0.01%, with temperature range 5 to 80℃ and 10 to 50℃.



- Used oil industry, pharmaceutical industry, paint industry, food industry, daily chemical industry, sugar industry, geological exploration or institutions
- With Measuring Prism made up of sapphire glass and hard glass
- Provide protection anti-corrosion
- Reduced chance of error by using CCD sensor
- LED cold light source with the long working life more than 100000 hours
- Automatic Temperature Compensation(ATC)
- Excellent storage up to 4 GB
- Comes with RS232/USB/SD card/U disk/Internet/Wi-Fi interface

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