Manual Polarimeter

Application:

Polarimeter is an instrument which measures the optical rotation of substances. It can be used in analyse the concentration, content & purity of substances.

- ✧ **Agriculture:** Analysis the content of Agriculture Antibiotics, Farm Hormone & Microbial Pesticides.
- ✧ **Medicine:** Analysis Antibiotics, Vitamins, Glucose & Chinese Herbal Medicine or Pharmacological Research.
- ✧ **Food:** Sugar, MSG, Soy Sauce Production Control & Inspection.
- ✧ **Oil:** Analysis Mineral Oil, Monitoring Petroleum Fermentation.
- ✧ **Perfume:** Analysis Essential Oils.
- ✧ **Health:** Analysis Hospital Clinical Diabetes.
- ✧ **Science & Education:** Institutions of higher learning and scientific research departments, scientific research and experimental testing.

Technical Specifications:

Model	WXG-4
Type	Manual
Measurement Range	-180°~+180°
Scale Value	1°
Vernier	0.05°
Magnifier	3X
Transmittance	1%
Light Source	Sodium Lamp plus Filter, Wavelength 589.44nm
Sample Tube	100mm, 200mm
Power Supply	220VAC/50Hz
Packing Size & Weight	500(L)×135(W)×330(H)mm & 6.5kg

POL-200 Semiautomatic Polarimeter

Features:

1. Multiparameter semiautomatic polarimeter is equipped with a 5 inches touch screen.
2. Select-able four measurement modes, including the optical rotation, specific rotation, concentration and international sugar scale.
3. LED light source effectively extends the working time of instrument.
4. Built-in temperature sensor automatically senses temperature of the sample chamber.
5. Auto-zero feature supports instrument returns to zero point by pressing the Return button.
6. Select-able tube lengths (100 and 200mm) or manual enter the desired values.
7. Zero correction allows adjusting the optical visual field to eliminate the zero error.
8. Automatic temperature compensation improves measurement accuracy of instrument.
9. 1 to 3 point calibration ensures accurate measured value over the entire range.
10. Automatic message display helps user quickly begin using the instrument,
11. Expanded memory stores and recalls up to 100 readings.
12. Built-in real-time clock stamps stored data to meet GLP standard.
13. Stored data can be transferred into computer by USB communication interface.
14. On-screen operating manual detailedly shows the polarimeter uses.
15. Reset feature automatically resumes all parameters back to factory default options.
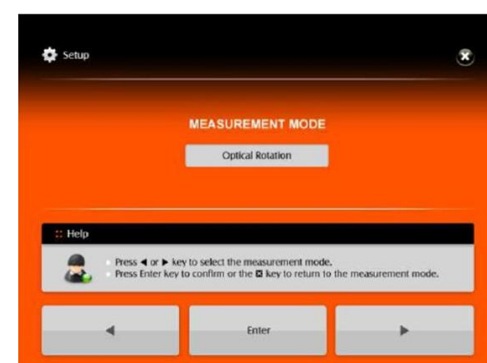
Application:

1. Research and education.
2. Chemical and pharmaceutical industry.
3. Food and sugar.
4. Industry, other industrial applications.

Meter includes:

Polarimeter tube 100 and 200mm, sealing rings and power cable.

Technical specifications:

Model	POL-200
Measurement modes	Optical rotation, specific rotation, concentration, international sugar scale
Measuring range	$\pm 90°$, $\pm 130°$ Z
Accuracy	$\pm 0.02°$, $\pm 0.05°$ Z
Resolution	$0.005°$
Calibration points	1-3 points
Wavelength	589nm
Light source	LED, interference filter
Temperature range	0-100℃
Temperature accuracy	± 0.5℃
Test tube	100 or 200mm
Memory	Stores up to 100 data sets
Output	USB communication interface
Language	English
Display	5.6 inch TFT touch screen
Power requirements	AC220V/50Hz
Dimensions	550(L)x300(W)x220(H)mm
Weight	7.5kg

Touch Screen Automatic Polarimeter

Application:

The Polarimeter is an instrument used for determining the optical rotation of substances. In this way, the concentration, content, purity, etc of certain substances can be found out. Therefore, the polarimeter has become one of the most useful instruments in laboratories of sugar industry, pharmaceutical industry, oil refining, foodstuff industry, chemical industry, universities and scientific research field.

Characteristics:

Use the incandescence lamp plus filter stand for sodium lamp in order to lengthen the service life of the light power (more than 2000 hours).

Need not prewarm when turning on.

Measuring specific rotation, optical rotation, sugar degree and concentration.

Automatic repetition-measurement for 6 times, and calculation of average value and means square root.

Sample chamber adopts constant temperature heating effect on measurement.

Temperature display and USB interface.

Specifications:

Model	SGW-1	SGW-2
Display	Color Touch Screen	
Light Source	LED, wavelength 589.44nm.	
Measurement Range	-45º~+45º	
Minimum Reading	0.001º (0.01º Z)	
Accuracy	±0.01(-15º«optical rotation«+15º). ±0.02(optical rotation<-15º, or optical rotation>+15º).	
Temperature Control Range	-------	18-30°C
Accuracy	+/-0.5°C	
Repeatability	Sample transmittance>1%≤0.002º (0.006ºZ)	
Sample Tube	100mm, 200mm	
Constant Temperature Test Tube	-------	1pc
Output	USB & RS232 interface	
Dimension	850×470×380mm	
Weight	37Kg	
Optional Accessories	Micro Test Tube (50mm), Flow Test tube (200mm)	

Automatic Polarimeter P850

P850 includes built-in Peltier precise temperature control system. P Series Polarimeter with automatic photoelectric inspection technology and WINDOWS HMI system, boasts accurate and reliable measurement, convenient operation and so
on. By detecting the optical rotation, the density, content and purity of substances etc. can be analyzed and determined.
It's widely used in medicine, petroleum, food, chemicals, flavors, spices, sugar marking, other industries and universities and research institutes.

Characteristics:

P850 Automatic photoelectric inspection technique and built-in Peltier precise temperature control system ensure measurement accuracy and stability;
Large color touch screen display and innovative WINDOWS software interface give extremely convenient device operation and data acquisition;
High brightness LED lights with service life exceeding 100000 hours;
A variety of measurement modes are optional, without using complicated manual calculation;
Extremely large storage capacity can store up to 1000 groups of data information automatically.
Optional:
Operator also can use reference tube to calibrate the instruments, it's more convenience for operator to keep performance of Polariemter

Technical Specifications:

Measuring range	$\pm$89.99°Arc
Min.reading	$\pm$259°Z
Accuracy	0.001°(optional rotation)
Repeatability (Standard deviations)	$\pm$0.01°(-45°$\leq$optical rotation$\leq$+45°)
Measurable sample min.transmittance	$\pm$0.02°(optical rotation<-45°or optical rotation>+45°)
Working wavelength	0.002°(optical rotation)
Temperature control mode	1%
Temperature control range	589.3nm (sodium D spectrum)
Temperature control accuracy	Built-in semiconductor
Temperature resolution	15~30℃
Interface	USB and RS232
Data storage capacity	1000 pieces
Display mode	5.6''TFT touch screen
Power supply	220VAC$\pm$10% 50Hz
Sample chamber	Accepts sample tubes up to 200mm
Power	250W
Net weight	26kg
Dimension	708x330x287mm