

POLARIMETER

Manual Lab Polarimeter



Rotate the vernier knob till the visual field to equal brightness. (Zero point)



Full-circle manual polarimeter is ideal for determining concentration levels of samples for application in the medical, educational, pharmaceutical, and cosmetic industries etc.

Easy Measurement

The polarimeter have 589.44nm sodium amp. After powered on, the polarized light, beam is immediately radiate to the filter, polarizer etc. You can observe distinct visual fields through eyepiece of instrument. Put the sample tube into measuring field chamber. Rotate the vernier knob again, you can view equal brightness. Read the scale from magnifier that is measured value.

Specific optical Rotation Measurement

Specific optical rotation is constant of substance, you can measure it by 100mm glass tube when temperature of solution is at 20°C

Purity Measurement

If you want to know sample's purity you need only measure it's the angle of rotation and calculate it.

Concentration Measurement

For substance of known specific optical rotation, you can measure the angle of rotation and calculation concentration accordingly.

International Sugar Scale

According to international sugar scale, the 26 grams of pure sugar in solution, the angle of rotation of solution is 34.262°. By rule, you can calculate the purity of sugar.

Model	LDPM-9	Make LABDEVICES
Measurement Range	-180° to +180°	
Scale Value	1°	
Vernier	±0.05°	
Magnifier	3X	
Light Source	Sodium Lamp	
Wavelength	589.44nm	
Parameter	Manual	
Round Cuvetter	100 or 200mm	
Stable Time	10 minutes	
Range of Accuracy	0 ~ ±180° (±0.05°)	
Power Requirements	230 Vac, ± 20%, 50-60Hz	
Dimension (LxWxH)	500 x 135 x 330mm	
Weight Approx.	6.5 kg	



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Touch Screen Automatic Digital Polarimeter LDADP SERIES

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 find 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.

Salient Features

- ◆ Touch screen colour display
- ◆ Temperature display
- ◆ Faraday magneto-optical modulator
- ◆ Polarizer Polarizing film
- ◆ Digital Polarimeter based on Optical null principle
- ◆ No warm-up time is required when instrument is switched on
- ◆ Measuring multiple scales - specific rotation, optical rotation, sugar degree and concentration
- ◆ Automatic repetition-measurement for 6 times, and calculation of average value.
- ◆ Measurement of dark-coloured sample
- ◆ Insulated Sample chamber to keep sample temp. constant
- ◆ User can set retesting sample between 1 to 6
- ◆ Photodiode Detector
- ◆ Data display - date, time, measuring mode, length of tube, temp. test time, measured value (1 - 6 values), average value,
- ◆ Purity method - saccharic concentration

Pharmaceutical industry

- ◆ Monitoring chemical processes
- ◆ Purity control and determination of concentrations
- ◆ Characterizations of new synthetic substances
- ◆ Hospitals & Pharmacies

Chemical industry

- ◆ Purity control and determination of concentrations
- ◆ Analysis of optically-active components (qualitative and quantitative)
- ◆ Determination of changes in the configuration
- ◆ Monitoring chemical processes

Sugar industry

- ◆ Quality control of original and end product
- ◆ Determination of fructose and glucose

Food industry

- ◆ Determination of concentration
- ◆ Purity control
- ◆ Quality control

STANDARD ACCESSORIES : Main Instrument, Test Tube 100mm, 200mm, Touch Pen, RS232C Cable, USB Cable, Power cord, Software CD, Instruction Manual, Test Certificate.

For LDADP90 - Peltier Test Tube 100mm, Test Tube Cleaning brush, Test Tube Accessories, Sample Inject Tube, Syringe with Needle.

