

ADP45, 90

CATALOGUE 2024-25



## Touch Screen Automatic Digital Polarimeter ADP45 & ADP90

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.



E - Catalogue

### 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, Test Certificate  
For ADP90 - Peltier Test Tube 100mm, Test Tube Cleaning brush, Test Tube Accessories, Sample Inject Tube, Syringe with Needle.

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**Automatic Digital Polarimeter Touch Screen**

HSN Code : 90275030

		MODEL	ADP45	ADP90
				LABMAN
Optical & Specific Rotation	No. of Measuring Mode (4)	Optical Rotation, Specific Rotation, Sugar, Concentration		
	Measuring Mode	Rotation		
	Measuring range	-45° +45°	-90° + 90°	
	Unit	Angle°		
	Resolution	0.001°		
	Accuracy	±0.01°	±0.004°	
	Measuring Mode	Sugar		
Sugar	Range	±120°Z	±259°Z	
	Unit	°Z		
	Resolution	0.01°Z	0.001°Z	
	Accuracy	±0.02°Z	±0.004°Z	
	Measuring Mode	Concentration		
Concentration	Range	0-99.9g/ml	0-100g/ml	
	Unit	g/100 ml		
	Resolution	0.1mg/ml		
	Accuracy	±0.5g/100ml		
	Temperature control	-	Peltier (Built In)	
Peltier	Temperature control range	-	10-50° C	
	Accuracy	-	±0.1°C & ±0.2°C	
	Constant temp. test tube	-	100 mm	
	Memory	-	5000 data sets	
Display	8" Colour datamatrix Touch Screen			
General spec.	Sample transmittance	> 1%	> 0.1%	
	Light Source	LED (2.4V, 1W, 5000hours)		
	Operation Wavelength	589.3nm	589.44nm	
	Length of Test Tube	100mm & 200mm		
	Power Supply	Adaptor, Using AC 220V,50/60Hz		
	Interface	USB & RS232C	USB Ethernet	
	Dimension (LxWxH) mm	850 x 470 x 380	745 x 410 x 295	
	Weight	35kg	42kg	

Optional Accessories : Micro test tube.

★ Specifications are subject to change without notice.