



ADP45 & ADP90 Automatic Digital Polarimeter Touch Screen

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

Catalogue 2021-22



HSN Code : 90275030

MODEL		ADP45	ADP90
Optical & Specific Rotation	Make	LABMAN	
	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°
Sugar	Measuring Mode	Sugar	
	Range	±120°Z	±259°Z
	Unit	°Z	
	Resolution	0.01°Z	0.001°Z
	Accuracy	±0.02°Z	±0.004°Z
Concentration	Measuring Mode	Concentration	
	Range	0-99.9g/ml	0-100g/ml
	Unit	g/100 ml	
	Resolution	0.1mg/ml	
	Accuracy	±0.5g/100ml	
Peltier	Temperature control	-	Peltier (Built In)
	Temperature control range	-	10-50° C
	Accuracy	-	±0.1°C & ±0.2°C
	Constant temp. test tube	-	100 mm
	Memory	-	5000 data sets
General Spec.	Display	8" Colour datamatrix Touch Screen	
	Sample transmittance	> 1%	> 0.1%
	Light Source	LED (2.4V, 1W, 5000hours)	
	Operation Wavelength	589.3nm	589.44nm
	Length of Test Tube	100mm & 200mm	
	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

★ Specifications are subject to change without notice.

* Software - Free