



## Automatic Digital Polarimeter

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
- Response time 3°/sec.
- 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
- ADP 89 - Peltier principle to control the temperature

### APPLICATION

#### Pharmaceutical industry

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

#### Chemical industry

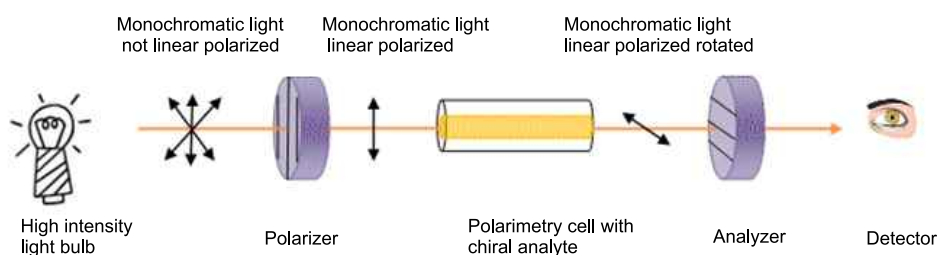
- Purity control and determination of concentrations
- Analysis of optically-active components (qualitative and quantitative)
- Determination of changes in the configuration
- Monitoring chemical processes

#### Sugar industry

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

#### Food industry

- Determination of concentration
- Purity control
- Quality control



MODEL		ADP-45	ADP-89
Make		LABMAN	
No. of Measuring Mode (4)		Optical Rotation, Specific Rotation, Sugar, Concentration	
Measuring Mode		Rotation	
Measuring range		-45° +45°	-89° +89°
Unit		Angle°	
Resolution		0.001°	
Accuracy		±0.01°	
Measuring Mode		Sugar	
Range		-120° +120°Z	-257° +257°Z
Unit		°Z	
Resolution		0.01°Z	
Accuracy		±0.02°Z	
Measuring Mode		Concentration	
Range		0–99.9g/ml	
Unit		g/100 ml	
Resolution		0.1mg/ml	
Accuracy		±0.5g/100ml	
Temperature control		-	Peltier
Temperature control range		-	15-30° C
Temperature resolution		-	0.1° C
Temp. Accuracy		-	±0.5°C
Constant temp. test tube		-	100 mm
Memory		-	99 data sets
Display		Touch Screen	
Sample transmittance		> 1%	
Light Source		LED (2.4V, 1W, 5000hours)	
Operation Wavelength		589.3nm	
Length of Test Tube		100mm & 200mm	
Interface		USB & RS232	
Dimension & Weight		850 x 470 x 380 mm & 35 kg approx.	

Optional Accessories : Micro test tube.

★ Specifications subject to change without notice.