

Automatic Digital Polarimeter ADP45, 50, 75, 90



ADP45, ADP50



ADP75, ADP90

Touch Screen

Automatic Digital Polarimeter

ADP SERIES

Range

Model		Peltier
ADP45	$\pm 45^\circ$	NA
ADP50		YES
ADP75	$\pm 90^\circ$	NA
ADP90		YES



E - Catalogue

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.

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

Automatic Digital Polarimeter Touch Screen

HSN Code : 90275030

SPECIFICATIONS

Optional Accessories : Micro test tube.

MODEL	ADP45	ADP50	ADP75	ADP90
Temperature control	NA	Peltier (Built In)	NA	Peltier (Built In)
Temperature control range	NA	10-50°C	NA	10-50°C
Accuracy	NA	±0.1°C & ±0.2°C	NA	±0.1°C & ±0.2°C
Constant temp. test tube	NA	100mm	NA	100mm
Optical & Specific Rotation				
Measuring range	-45° +45°		-90° +90°	
Unit	Angle°		Angle°	
Resolution	0.001°		0.001°	
Accuracy	±0.01°		±0.004°	
Sugar				
Range	±120°Z		±259°Z	
Unit	°Z		°Z	
Resolution	0.01°Z		0.01°Z	
Accuracy	±0.1°Z		±0.1°Z	
Concentration				
Range	0-99.9g/ml		0-100g/ml	
Unit	g/100 ml		g/100 ml	
Resolution	0.1mg/ml		0.1mg/ml	
Accuracy	±0.5g/100ml		±0.5g/100ml	
Memory	NA		10000 data sets	
Sample transmittance	> 1%		> 0.1%	
Operation Wavelength	589.3nm		589.44nm	
Display	7" Touch Screen		8" Touch Screen	
Interface	USB & RS232C		USB & RS232C	
Dimension (LxWxH)	820 X 510 X 500mm	815 X 510 X 510mm	870 x 520 x 480mm	860 x 520 x 460mm
Gross Weight	37kg	42kg	33kg	34kg
Make	LABMAN			
No. of Measuring Mode	4 (Optical Rotation, Specific Rotation, Sugar, Concentration)			
Light Source	LED			
Length of Test Tube	100mm & 200mm			
Power Supply	AC 220V,50/60Hz			

★ Specifications are subject to change without notice.

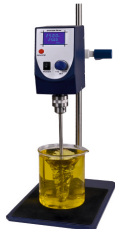
STANDARD ACCESSORIES : Main Instrument, Test Tube 100mm, 200mm, Touch Pen, USB Cable, Power cord, Software Pen drive, Instruction Manual, Test Certificate.

For ADP50 & ADP90 - Additional as Peltier Test Tube 100mm, Test Tube Cleaning brush, Test Tube Accessories , Syringe with Needle.

LABMAN Product Range 2025-26

LMFD61, 62, 63, 64 Lyophilizer Freeze Dryer (-60°C)	LMFD83, 84 Lyophilizer Freeze Dryer (-80°C)	LMRE25 Rotary Evaporator	ADM3 Automatic Density Meter	MSOD6 Microvolume Spectrophotometer
NAE32 Nucleic Acid Extractor	EMR4 Elisa Microplate Reader	GPTC96 Gradient PCR Thermal Cycler	HO30 Hybridization Oven	UVCL254 UV - Crosslinker
TGH12, 24 Tissue Grinder Homogenizer	PBH80T Paddle Blender Homogenizer	TOC2NDir Total Organic Carbon Analyzer	TOC1CD Total Organic Carbon Analyzer	LMDS600, 1200 Microwave Digestion System
HPLC1IS, HPLC2GS High Performance Liquid Chromatography	APT1800 Automatic Potential Titrator	KFT250VC Karl Fischer Titrator	COD1500 COD Analyzer with Digestor	BOD4000 BOD Analyzer
MTVM50 Multi Tube Vortex Mixer	LMVM60D Vortex Mixer	OS20 Orbital Shaker	TRM6 Tube Roller Mixer	DBNE12, 24 Dry Bath Nitrogen Evaporator

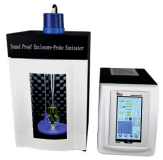
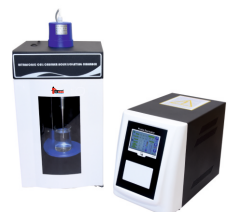
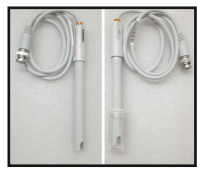
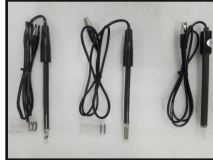
LABMAN Product Range 2025-26

DBI11T  Dry Bath Incubator	DBI15SH, DBI16SC  Dry Bath Incubator	IRS14, 35  Infrared Sterilizer	GGA200  Air Generator	GGA301, 302  Hydrogen Generator
GGN303  Nitrogen Generator	GHA304  Hydrogen Air Generator(2 in 1)	LMVP10  Vacuum Pump	LMVP20  Vacuum Pump	LMCO1  Column Oven
LMIO6  Mini Thermostatic Incubator	GHP400  Graphite Hotplate	LOBMS5  Oil Bath Magnetic Stirrer	LMMS4LC, 20LC  Ceramic Hotplate Magnetic Stirrer	LMMS300  Hotplate Magnetic Stirrer
MMS15S  Multiposition Magnetic Stirrer	MMS12H  Multiposition Magnetic Stirrer	WBMS3  Water Bath Magnetic Stirrer	LMWB2H, 4H, 6H, 8H  Digital Water Bath	HOS20L  Overhead Stirrer
LMHH160  Hand Held Homogenizer	PS1565  Peltier / Sipper System	LUV6HG  PMT Spectrophotometer	LUV2000T, 2100T  Single / Double Beam UV-Vis. Spectrophotometer with 21CFR	LMSPUV SERIES  Double Beam UV-Vis. Spectrophotometer

LABMAN Product Range 2025-26

LMSPUV1200  UV-Vis. Single Beam Spectrophotometer	LMSPV320, 325  Visible Spectrophotometer	ADP100CFR, 95CFR  Automatic Digital Polarimeter with CFR	ADP45, 50  Automatic Digital Polarimeter (±45°)	ADP75, 90  Automatic Digital Polarimeter (±90°)
ADP40  Automatic Digital Polarimeter	LMPM180  Manual Polarimeter	MAR100  Manual ABBE Refractometer	RFM100CFR  Digital Refractometer CFR	RFM950, 970  Digital Refractometer
LMAR1317T  ABBE Refractometer	LMDV300H  Digital Viscometer with Thermosel	LMDV60, 100, 200  Digital Viscometer (L Series)	LMDV400R  Digital Viscometer (R Series)	LMKV2  Krebs Viscometer
LMDV111, 222  Digital Viscometer with SSA	LVA30  Low Viscosity Adaptor	LMCR80F  Visual Colorimeter	LMUC2D  Ultrasonic Cleaner	LMUC3D, 6D, 9D, 12D, 25D  Ultrasonic Cleaner - Degas
LMUC50, 100  Industrial Ultrasonic Cleaner	LMPH15  pH Meter with Printer	LMPH12, LMPH10H  pH Meter	LMPH9  pH Meter - Basic	LMCM20H  Conductivity / TDS Meter

LABMAN Product Range 2025-26

LMCM20H  Conductivity / TDS Meter	LMMP30, 32  Multiparameter (7 in 1 / 9 in 1)	LMION40  Ion Meter	LMDO50  Dissolved Oxygen Meter	LMHD60  Water Hardness Meter
OPH11  Online pH Controller	OCM21  Online Conductivity Controller	LMTB200  Turbidity Meter	RCB1010T, 1020T, 1030T  Refrigerated Circulating Bath	RCB620T  Refrigerated Circulating Bath
RWC320  Recirculating Water Chiller	LMDO4P  Portable DO Meter	LMPH1P  Portable pH / ORP Meter	LMCM2P  Portable Conductivity / TDS Meter	LMTB5P  Portable Turbidity Meter
PRO656, 900, 1200, 1800  Probe Sonicator	PRO660R  Probe Sonicator with Remote	PRO650  Probe Sonicator	LMIF30T, 50T, 100T  Ice Flaker	LMIF200T  Ice Flaker
LMIM15  Ice Maker	LMIM20C  Ice Maker with Crusher	ISE19, 62  Nitrate / Fluoride ISEs	ER SERIES  pH Electrode / DO Electrode	CC1, CC2, CC3  Conductivity Cell