



# Polarimeter Saccharimeter



**Advance Research Instruments Company**



OPTICS & INSTRUMENTATION

ISO 9001:2008

CERTIFIED

## POLARIMETER SACCHARIMETER

**ADVANCE** has been designing and manufacturing precision Polarimeters and Saccharimeters for the last 40 years. This experience ensures the best and latest in Polarimeter technology, designs and features are incorporated in our instruments. Polarimeters are used for the determination of the Optical Rotation of all Optically Active substances and used in testing Pharmaceuticals, Chemicals, Essential Oils, Sugars, Foodstuffs, Brewery products etc..

The Polarimeters and Saccharimeters are available in two series. The PA Series is suitable for observation tubes upto 220mm while PB series can accommodate tubes upto 400 mm. They offer an accuracy of 0.01° Angular Scale and 0.5° ISS.

An outstanding feature of ADVANCE Polarimeters is the incorporation of precision glass scale and scale plate with minutely finished rotating mechanism and Tropic proof highly sensitive optical system. The test result can be read precisely and directly without the aid of a vernier and its associated errors.

The latest addition is use of an Integrated Lighting System, in place of the bulky and fragile Sodium Lamp, which gives the advantage of immediate illumination while saving table space and electrical power.

The advance optical system of the Polarimeters and Saccharimeters have been designed in order to minimize the destructive influences of a hot and humid climate and abrupt temperature changes on the sensitive optics and are suitable for use in Tropical conditions.

Superior quality Optics & highly sensitive Triple Shadow offers the following advantages

- Permanent focus with difficult and dark liquids
- High accuracy and repeatability along with strain free viewing
- Triple Shadow System rotates with the circle thus affording immediate indication of the direction of the material being examined.

### SAMPLETUBES

A wide selection of sample tubes, like Side Filling, Center Filling and Jacked tubes are available. Sample tubes are available from 10mm/0.1dm, 25mm/0.25dm( both in stainless steel), 50mm/0.5dm , 100mm/1dm, 200mm/2dm, 220mm/2.2dm, 400mm/4dm. Jacketed tubes for precision temperature control of samples are available in 100mm 200mm lengths .Centre filling tubes are also supplied on request.

### TECHNICAL SPECIFICATIONS

Instrument Name	Polarimeter	Polarimeter	Polarimeter	Polarimeter / Saccharimeter	Polarimeter / Saccharimeter
<b>Model No.</b>	<b>PA-2</b>	<b>PA-1R (Standard)</b>	<b>PA-1R (Deluxe)</b>	<b>PB-1R(Standard) / PB-4 (Standard)</b>	<b>PB-1R (Deluxe) / PB-4 (Deluxe)</b>
<b>Tube Length (Maximum)</b>	220 mm	220 mm	220 mm	400 mm	400 mm
<b>Shadow System</b>	Half/ Triple Shadow	Improved Triple Shadow	Imported Triple Shadow & High Definition Optical System	Improved Triple Shadow	Imported Triple Shadow & High Definition Optical System
<b>Angular Scale</b>	0 – 360 °	0 – 360 °	0 – 360 °	0 – 360 °	0 – 360 °
<b>Angular Scale Accuracy</b>	0.05 °	0.01 °	0.01 °	0.01 °	0.01 °
<b>International Sugar Scale</b>	± 130 °Z	± 130 °Z	± 130 °Z	± 130 °Z	± 130 °Z
<b>ISS Accuracy</b>	0.1°Z	0.05°Z	0.05°Z	0.05 °Z	0.05 °Z
<b>Light Sources</b>	Sodium Lamp / Integrated Light Source	Sodium Lamp / Integrated Light Source	Sodium Lamp / Integrated Light Source	Sodium Lamp / Integrated Light Source	Sodium Lamp / Integrated Light Source
<b>Standard Sample Tube (Side Filling with Spare Window Glass and Washer)</b>	200 mm: 01 No.	100mm : 01 No. 200 mm : 01 No.	100mm: 01 No. 200 mm: 02 No.	200mm : 01 No. 400 mm : 01 No.	100mm : 01 No. 200 mm : 01 No. 400mm : 01 No.
<b>Size</b>	27"x13½" 14 ½	28"x13½" 14 ½	28"x13½" 14 ½	28"x13½" 14 ½	28"x13½" 14 ½
<b>Weight</b>	11 kg	12 kg	12 kg	15 kg	15 kg

Cold/Hot water circulating baths for Sample Tube Temperature Control available as additional accessory

