

Polarimeter is an instrument used for determining optical rotation of substances. It is also used for measuring specific rotation, concentration & international sugar scale of optically active substances. Polarimeter is ideal for pharmaceutical, food and beverages, sugar, cosmetics, oil refinery, chemical industries & also scientific research studies.

**CONTECH** Digital Polarimeter is a fully automatic instrument and eliminates the need for manual adjustments thus offering a high degree of measurement precision.

The polarized light after passing through the sample falling on the analyzer deviates from the optical zero position to the extent of optical rotation of the sample and the photomultiplier detector will produce an electrical signal with the frequency corresponding to the optical rotation of the sample. This signal after passing through the selective frequency circuit and power amplifier drives the servo-motor & in turn the analyzer until the optical zero position is regained. The analyzer rotation is measured by an encoder and is displayed on the digital readout as the optical rotation of the sample.

## Features

- Measures optical rotation, specific rotation, concentration and sugar content.
- Based on Optical Null principle.
- Multiple readings and calculation of average value and standard deviation.
- Measurement of dark samples upto 1% transmittance due to adjustment of high voltage supply to the detector in accordance with the darkness of sample.
- RS-232 interface.
- Large backlite LCD display.
- Various types of sample tubes,  
Sample tube length : 100 mm or 200 mm



Spacious sample compartment for the convenience of sample handling & cleaning

## Specifications

Light source	: Monochromatic Sodium Lamp.
Wave length	: 589.44nm
Modulator	: Faraday magneto optical modular.
Measuring Range	
Optical Rotation	: $-45^{\circ} \sim +45^{\circ}$
International Sugar Scale	: $-120^{\circ} \sim +120^{\circ} Z$
Accuracy	
Optical Rotation	: $\pm(0.01^{\circ} + \text{measuring value} \times 0.05\%)$
International Sugar Scale	: $\pm(0.03^{\circ} Z + \text{measuring value} \times 0.05\%Z)$
Minimum transmittance of sample	: 1%
Power Supply	: 230V, $\pm 10\%$ AC, 50/60 Hz
Dimensions	: 600mmx320mmx240mm
Weight	: 30kg



Easy to operate through a menu driven system, display of setup & measuring parameters on a large LCD screen.

Specifications and Designs are subject to changes for improvement



*State Of The Art Manufacturing Plant*

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