

# POLARIMETER

## DIGIPOL



The Digipol & Digipol+ Polarimeter, equipped with advanced automatic photoelectric inspection technology, offers precise and dependable measurements along with user-friendly operation. This device enables the analysis and determination of substances' optical rotation, density, content, and purity. Widely utilized in pharmaceuticals, petroleum, food, chemicals, flavors, spices, sugar production, as well as other industries, universities, and research institutes.

### FEATURES



#### 5.6" TO 8" TOUCH SCREEN

Resistive high quality Touch Screen Display



#### IN-BUILT COMPUTER

Upto 8GB RAM



#### 21 CFR COMPLIANT

FDA 21 CFR Part 11, covering traceability, E-signature, and User ID management functions.



#### SELF CALIBRATION

Additional standard polarization tubes along with software

## FEATURES

### Peltier Temperature Regulation

The Peltier system autonomously manages sample temperature within a broad range, spanning from 10 °C to 50 °C.

### User-Calibration System

Included are additional standard polarization tubes along with software, allowing users to perform their own calibrations.

### FDA 21 CFR Part 11 Regulatory Compliance

Digipol & Digipol+ complies with FDA 21 CFR Part 11 regulatory requirements, encompassing traceability, E-signature, and User ID management functions.

### 8-Inch Touch Screen with Android-Based Software

Utilizing Android operating software for user-friendly navigation, the device also supports the installation of laboratory regulatory software or functions. It provides 8GB of storage capacity for storing results, methods, or traceability records.

### Password Protection

Enhanced security features include the activation of password aging functionality, thereby improving operators' permission aging management.

## CHARACTERSTICS

- Simplify daily calibration for users with the automatic calibration function.
- Utilize high-brightness LED lights with a service life exceeding 100,000 hours, eliminating the need for light source replacement.
- Ensure a wide measuring range with a  $\pm 89.99^\circ$  arc.
- The Peltier system automatically controls the sample temperature in the range of 10 °C to 50°C for Digipol +.
- Conveniently search results with the classify and synchronous result searching function.
- Enhance user convenience with 3 USB ports for U-Disk, keyboard, and mouse connections, along with WiFi for connecting to a printer.
- Utilize data backup software to connect to a PC for importing or exporting data.
- Enable multistage or piecewise function calculation with the formula editor.

## SPECIFICATIONS

Model	Digipol	Digipol+
Measuring range	$\pm 89.99^\circ$ Arc; $\pm 259^\circ$ Z	
Measuring Model	Optical Rotation; Specific Rotation; Concentration; Sugar Degree	
Min.reading	0.001°(optical rotation)	
Accuracy	$\pm 0.01^\circ$ ( $-45^\circ \leq$ optical rotation $\leq +45^\circ$ ); $\pm 0.02^\circ$ (optical rotation $< -45^\circ$ or optical rotation $> +45^\circ$ )	
Repeatability (standard deviation)	0.002°(optical rotation)	
Light Source	LED	
Wavelength	589.3nm	
Temperature Control	No Peltier	With Peltier
Temperature Control Range		10°C~50°C
Temperature Control Accuracy		0.2°C
Temperature Resolution		0.1°C
Communication Port	USB; RS232, Wi-Fi	USB×3, RS232, Wi-Fi
Data Storable	1000	8GB
Display	5.6 inch	8 inch
<b>21 CFR Part 11</b>	<b>Yes</b>	<b>Yes</b>
Tamper-Proof Data Output	Yes	
Sample Cell	Up to 200mm	
Power	220V AC ( $\pm 10\%$ ) 50Hz	
Calibration (rotation value)	Optional	
Optional Parts	Sample tubes, including corrosion-resistant tubes or micro tubes	