



## Automatic Polarimeter

### P810/P850/P810 Pro/ P850 Pro

P Series Polarimeter with automatic photoelectric inspection technology, boasts accurate and reliable measurement, convenient operation. By detecting the optical rotation, the density, content and purity of substances can be analyzed and determined. It's widely used in pharmaceutical, petroleum, food, chemicals, flavors, spices, sugar marking and other industries, and universities and research institutes. New upgraded models: P810 Pro/ P850 Pro adopt brilliant Android system and communication ports, let new models meet FDA 21 CFR Part 11.



#### Characteristics

- Meet FDA 21 CFR Part 11(P810Pro/P850 Pro).
- Automatic calibration function, let daily calibration easier by users
- High brightness LED lights with service life exceeding 100000 hours. To void the light source exchanging.
- $\pm 89.99^{\circ}\text{Arc}$  ensuring the measuring range widely
- The Peltier system automatically controls the sample temperature in the max range from 10 °C to 50°C(P850/P850 Pro)
- Classify and synchronous result searching function is convenience for user's result searching.
- 3 USB port for U-Disk, keyboard mouse connecting. And WiFi for connecting printer. Let operating much easier.
- Adopt data backup software for connecting to PC, for importing or exporting data(except P810).
- Adopt formula editor for setting multistage or piecewise function calculation(except P810).
- Chinese, English and Russian Switchable(except P810)



#### Features

##### Peltier Temperature Control

The Peltier system automatically controls the sample temperature in the max range from 10 °C to 50 °C.

##### User Calibration System

Additional Standard polarization tubes with software for calibration by the user.

##### 8inch touch screen with Android based software

Based on Android operating software for easier using, and also can install laboratory regulatory requirement software or functions; 8GB for storing results, methods or traceability records.

##### Meet FDA 21CFR part 11

P810Pro/P850Pro meet the regulatory requirements about FDA 21 CFR Part 11, including traceability, E-signature, User ID management functions, etc.

##### Password Protection

The password aging function is enabled, enhanced the operators' permission aging management.

#### Technical data

|                                    | P810                                                                                                      | P850               | P810 Pro | P850 Pro  |
|------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------|----------|-----------|
| Measuring range                    | ±89.99°Arc; ±259°Z                                                                                        |                    |          |           |
| Measuring Model                    | Optical Rotation; Specific Rotation; Concentration; Sugar Degree                                          |                    |          |           |
| Min.reading                        | 0.001°(optical rotation)                                                                                  |                    |          |           |
| Accuracy                           | ±0.01° (-45°≤ optical rotation ≤ +45°);<br>±0.02° ( optical rotation < - 45° or optical rotation > + 45°) |                    |          |           |
| Repeatability (standard deviation) | 0.002°(optical rotation)                                                                                  |                    |          |           |
| Light Source                       | LED                                                                                                       |                    |          |           |
| Wavelength                         | 589.3nm                                                                                                   |                    |          |           |
| Temperature Control                | No                                                                                                        | Peltier            | No       | Peltier   |
| Temperature Control Range          |                                                                                                           | 10°C~50°C          |          | 10°C~50°C |
| Temperature Control Accuracy       |                                                                                                           | 0.2°C              |          | 0.2°C     |
| Temperature resolution             |                                                                                                           | 0.1°C              |          | 0.1°C     |
| Communication Port                 | USB; RS232                                                                                                | USB×3,RS232, Wi-Fi |          |           |
| Data Storable                      | 1000                                                                                                      | 8GB                |          |           |
| 21CFR Part 11                      | No                                                                                                        |                    | Yes      |           |
| Tamper-proof data output           | No                                                                                                        | Yes                |          |           |
| Display                            | 5.6-inch                                                                                                  | 8-inch             |          |           |
| Sample Cell                        | Up to 200mm                                                                                               |                    |          |           |
| Graphic                            | No                                                                                                        | 4 hours            |          |           |
| Power                              | 220V AC (±10%) 50Hz                                                                                       |                    |          |           |
| Calibration (rotation value)       | Optional                                                                                                  |                    |          |           |
| Optional Parts                     | Sample tubes,inclusing corrosion-resistant tubes or micro tubes                                           |                    |          |           |