Polarimeter

The Alpol-P series polarimeters are instruments used to measure the optical rotation of substances. By determining the optical rotation, it is possible to analyze and determine the specific rotation, international degree of sweetness, concentration, and purity of substances. These instruments are widely applied in industries such as pharmaceuticals, petroleum, food, chemicals, fragrances, flavors, sugar production, and related universities and research institutes



Alpol-P610 fully Automatic Digital Polarimeter

Innovation Points to Improve Efficiency

- AI automatically sets parameters
- Built-in Peltier temperature control to improve accuracy and stability
- LED cold light source instead of traditional sodium light and halogen tungsten lamp
- Fully comply with GLP GMP certification specifications
- Multi-level permission management, permission can be configured freely
- 8 inch color touch screen, user-friendly operation interface
- In line with 21CFR requirements (electronic signature, data traceability, audit tracking, data tamper-proof and other functions)

The Key Technical Indexes

Measurement mode	Optical rotation, specific rotation, concentration, sugar and custom formula
Light source	LED cold light source + high precision interference filter, the light source is closed when not tested
Working wavelength	589.3nm
Test function	Single, multiple and continuous measurement mode
Measurement range	Optical rotation ±90°, sugar degree ±259°Z
Minimum reading	0.001°
Accuracy	±0.004°
Repeatability	(Standard deviation s) 0.002° (optical rotation)
Temperature control range	10°C-55°C (Peltier temperature control)
Temperature resolution	0.1°C
Temperature control accuracy	±0.1°C
Display mode	10.1 inch TFT true color touch screen
Standard test tubes	200mm, 100mm ordinary type, 100mm temperature control type (optional Harker alloy temperature control tube of various lengths)
Transparency	0.01%
Data storage	32G
Automatic calibration	Yes
Audit trail	Yes
Electronic signature	Yes
Method library	Yes
Multifunctional retrieval	Yes
WIFI printing	Yes
Real-time monitoring	with optical rotation timing real-time detection, and with optical rotation real-time spectrum;
Scanning interface	The scanning gun can scan the QR code directly
Operating system	Android operating system, touch screen control operation interface, simple and fast software, the operating system has audit tracking, user permission management, electronic signature, user disable and unblock functions, and the system meets the requirements of FDA21CFR-Part11, GMP, GLP and electronic signature
User management	User management: there are / four levels of permission management
User disables unlock function	User disables unlock function: Yes
Export in multiple file formats	Export in multiple file formats: PDF and Excel
Communication interface	Communication interface: USB connection, RS232 connection, VGA, Ethernet
Instrument grade	Instrument grade: 0.01 grade
Other optional accessories	Other optional accessories: temperature control tubes of 50mm and 200mm in length, mouse, keyboard connection, universal printer/wireless network printer
Power supply	Power supply: 220V±22V,50Hz±1Hz, 250W
Net weight of instrument	Net weight of instrument: 28kg