

- L** LABORATORY
- P** PROCESS
- S** SOFTWARE
- A** AUTOMATION

# UniPol - Series

**Polarimeter**  
With Automatic  
Wavelength Control  
(AWC)



## SPECIFICATIONS

### UniPol

### UniPol 1000

### UniPol 2000

Measurement scales	°Optical rotation, °Specific rotation, °Z International Sugar Scale, % Concentration (g/mL, g/100mL, g/L) 7 scales freely definable		
Measuring range	± 360° / ± 259°Z		
Resolution	0.01° / 0.02°Z	0.001° / 0.01°Z	0.001° / 0.01°Z
Precision	± 0.01° / ± 0.03°Z *	± 0.005° / ± 0.02°Z *	± 0.005° / ± 0.02°Z *
Reproducibility	± 0.01° / ± 0.03°Z	± 0.005° / ± 0.02°Z	± 0.005° / ± 0.02°Z
Sensitivity	Up to OD 3		
Wavelength	589 nm (other on request)		405 and 589 nm
Response time	6 to 8 sec. over the entire measuring range		
Measuring tubes	Different models, 10 to 200 mm length; Material: glass, stainless steel, acid-proof stainless steel; stainless steel tubes with integrated temperature sensor***; T-Cell Polarimeter tubes**** (Temperature control via Peltier-elements)		
Temperature measurement	NTC Sensor		
Temperature range	0°C to 99°C		
Resolution	0.01°C		
Precision	± 0.03°C		
Temperature regulation - T-cell tubes	18°C to 40°C	<b>NEW: with integrated Peltier-control****</b>	
Resolution	0.01°C		
Precision	± 0.1°C		
Light source	LED, interference filter		
Display	LCD-Display, monochrom		
Operation	Alpha numerical keyboard, 20 characters inclusive function keys		
Interfaces / Communication	RS232 (2x), Parallel (1x), USB**, Ethernet**		
Standard models	UniPol ; UniPol P****	UniPol 1000 ; UniPol 1000 P****	UniPol 2000 ; UniPol 2000 P****
Conformity	International Pharmacopoeia, OIML, ASTM, ICUMSA, Australian Standard K157		
Highlights	Standard circle polarimeter for common applications; GLP/GMP conform; 21 CFR part 11 ready; energy saving LED light source; Modell 1000 / 2000 with autom. wavelength control (AWC); capable for micro cuvettes		

### Polarimeter applications

Polarimetry is an instrumental analytical method using the optical activity of inorganic and organic compounds as a non-destructive measure of their concentration in a solution.

### Applications often used

- Determination of concentration
- Purity analysis
- Quality control
- Scientific analysis

### Typical applications of the models

- Raw, intermediate and final products of sugar cane and beet processing
- Food (sugar, starch, milk and food additives, sugar-free sweeteners like isomalt)
- Dairy products (lactose, sucrose, lactoglobulin, lactic acids)
- Pharmacy (reception and product control)

- \* Standard conditions
- \*\* Optional
- \*\*\* Certificate on request
- \*\*\*\* P-version for T-cell tubes

