

**L** LABORATORY

**P** PROCESS

**S** SOFTWARE

**A** AUTOMATION



**SCHMIDT  
HAENSCH**  
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# Polartronic H532

Polarimeter

Calibration free by  
spectral lamps



## SPECIFICATIONS

## POLARTRONIC H532

Measurement scales	°Optical rotation, °Specific rotation, °Z International Sugar Scale, % Concentration (g/mL, g/100mL, g/L) 7 scales freely definable
Measuring range	± 360°, switchable
Resolution	0.0001° / 0.01°Z
Precision	± 0.002° / ± 0.01°Z *
Reproducibility	± 0.001° / ± 0.01°Z
Sensitivity	Up to OD 5, dependent on the wavelength
Wavelength	Up to 5 wavelengths fixed 365, 435, 546, 578, 589 nm (others upon request)
Response time	≤ 4 sec. over the entire measuring range
Measuring tubes	Different Models, 10 to 200 mm length, normal- and microvolume Material: glass, stainless steel, acid-proof stainless steel, stainless steel tubes with integrated temperature sensor***
Temperature measurement	NTC sensor
Temperature range	0°C to 99°C
Resolution	0.01°C
Precision	± 0.03°C
Light source	Spectral lamps, calibration free
Display	LCD display, monochrom
Operation	Alpha numerical keyboard, 16 x 16 characters
Interfaces / Communication	2x RS232, 1x parallel, USB**, Ethernet**
Standard model	H532
Conformity	International Pharmacopoeia, OIML, ASTM, ICUMSA, Australian Standard K157
Highlights	High performance circle polarimeter, ideal for applications requiring extreme accuracy when dealing with different substances; e.g. in pharmaceutical, medical and chemical laboratories calibration free, continuously measuring mode; GLP/GMP conform; 21 CFR part 11 ready, optional software (Aquisys)

\* Standard conditions  
\*\* Optional  
\*\*\* Certificate on request

### 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
- Research
- Determination of Optical Rotatory Dispersion (ORD)
- Monitoring of concentration changes as a function of time

#### Typical applications of the model H532

- Pharmaceuticals (alkaloids, amino acids, organic compounds, vitamins, essential oils, antibiotics, serums)
- Chemicals (organic fluids, biopolymers, synthetic and organic polymers, benzene, acids, esters etc.)
- Research (analysis of molecular structure, investigation of kinetic reactions as function of time, distinction of optical isomers, monitoring changes in concentration of an optically active component in a reaction mixture as in enzymatic scission)

