

L LABORATORY

P PROCESS

S SOFTWARE

A AUTOMATION



**SCHMIDT
HAENSCH**
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VariPol C

Polarimeter
The next generation



SPECIFICATIONS

VariPol C

Measurement scales	°Optical rotation, °Specific rotation, °Z International Sugar Scale, % Concentration (g/mL, g/100mL, g/L), further scales freely definable
Measuring range	± 90° / ± 259°Z
Resolution	0.001° / 0.01°Z
Precision	± 0.01° / ± 0.03°Z *
Reproducibility	± 0.01° / ± 0.03°Z
Sensitivity	Up to OD 2.0
Wavelength	1 or 2 wavelengths fixed, standard 589 nm, others on request in the range 365 to 882 nm
Measuring time	6 to 8 sec. over the entire measuring range
Measuring tubes	Up to 100 mm length; standard tubes micro tubes, compact tubes Material: glass, stainless steel, acid-proof stainless steel
Temperature measurement	NTC sensor / RFID**
Temperature range	10°C to 40°C
Resolution / Precision	0.01°C / ± 0.1°C
Peltier temp. regulation of the sample room	18°C to 25°C
Resolution / Precision	0.01°C / ± 0.1°C
Light source	LED, interference filter
Display / Operation	4.3" capacitive touchscreen, 472 x 280 Pixel
Interfaces / Communication	RS232, special connector, USB, Ethernet, WIFI**
Conformity	International Pharmacopoeia, OIML, ICUMSA, Australian Standard K157
Dimensions	430 x 300 x 160 mm (w x d x h)
Highlights	Basic Polarimeter especially designed for pharmaceutical applications; Peltier system for automatic temperature control; easy to calibrate via AWC+ (Automatic Wavelength Control); 21 CFR part 11 ready; Software Aquisys 2008 optional; energy saving durable LED's; wireless automatic identification of sample tubes via RFID**

* Standard conditions

** Optional, available starting from 4th quarter 2015

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 model

- 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)

