

## Technical Data

Model	N-Series	M-Series
Scale	Optical Rotation, International Sugars Scale, specific concentration, concentration %, user defined	
Measuring range	$\pm 360^\circ / \pm 259^\circ Z$	$\pm 360^\circ / \pm 259^\circ Z$
Resolution	0.01° / 0.05°Z	0.001° / 0.01°Z
Precision	$\pm 0.01 / \pm 0.05^\circ Z$	$\pm 0.005 / \pm 0.02^\circ Z$
Repeatability	$\pm 0.01^\circ / \pm 0.05^\circ Z$	$\pm 0.005 / \pm 0.02^\circ Z$
Temperature accuracy	0.03°C, autom. temperature correction	
Measuring time	≤ 4 sec. for measuring of standard solutions over the entire measuring range	
Sensitivity	OD 3.0	
Light source / Life time	LED / 50,000 h	
Wavelengths	1 or 2 wavelengths fixed: 405, 435, 578, 589, 633, 882 nm	1 or 2 wavelengths fixed: 405, 435, 578, 589, 633, 882 nm
Polarimeter tubes	50 / 100 / 200 mm	50 / 100 / 200 mm, Micro tubes
Display / Operation	Graphics-LCD 16 x 16 characters / alpha numerical keyboard	
Interfaces	1x parallel, 2x serial RS 232, 1x PS2, 1x USB (optional)	
Power supply	Wide range power supply 90 - 265 V	
Dimensions / Weight	733 x 160 x 365 mm (L x H x W), approx. 28 kg	
Standards	European and American Pharmacopoeia, GLP/GMP documentation, Australian Standard K157, O.I.M.L., Prepared for CFR21 part 11 with a corresponding, optional software (Aquisys®2008)	
Applications	<p>Polarimetric determination of concentration, purity analysis and scientific analysis in the following branches:</p> <p><b>Food industries</b> Sugar, starch, milk and dairy products, juice, food additives, amino acids, spirits</p> <p><b>Pharmaceutical industry</b> Enantiomers, chirale substances like soaps, amino acids, organic substances, glucose, fructose, purity control (codeine, cocaine, nicotine, morphine, sulphates), ascorbic acid, camphor, menthol, essential oils, drug recognition</p> <p><b>Medicine</b> Optically active metabolic substances like sugar and albumin contents in urine, hormone determination, poison analyses, testosterone, enzymology and toxicology</p> <p><b>Chemical research</b> Analysis of optically active substances and structural analyses, inorganic ions in conjunction with organically active substances (e.g. -Bi, -Cd, -Cu, -Fe, -Hg) in solutions, organic substances, turpentine, benzene, acids, esters etc.</p>	

Subject to modification without notice  
Änderungen vorbehalten  
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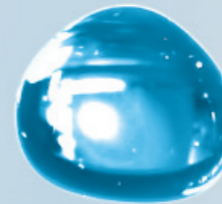
**SCHMIDT + HAENSCH**  
Opto-electronic measuring device since 1864



ISO 9001:2000



# Polartronic N & M-Series Laboratory-Polarimeter



**SCHMIDT + HAENSCH**  
Opto-electronic measuring device since 1864

# The new Polarimeter generation

new **benchmarks** by  
SCHMIDT+HAENSCH

The new polarimeter series by SCHMIDT+HAENSCH are replacing the well established Polartronic series and setting new benchmarks in respect of precision repeatability and data management.

The unique measuring principle with direct reading of the rotation angle, without mechanical transmission is resulting in guaranteed unmatched precision and fastest reading of the measuring values over the entire measuring range. SCHMIDT+HAENSCH is the only producer of polarimeters that guarantee a constant precision over the entire measuring range.

SCHMIDT+HAENSCH is a worldwide successful specialist for Polarimetry and Refractometry since 1864. We are continuously in an intensive dialogue with our costumers. The results of these contacts are implemented in the new generations of instruments. The advanced data management and the orientation on clearly defined applications is one of the consequences.

Another is the new compact instrument design but still robust and made from metal. It is mechanically more stable and more resistant toward a great number of mediums than plastic housings usual in the market.

The new polarimeters use the SCHMIDT+HAENSCH modular electronics and software platform.

SCHMIDT+HAENSCH is now providing the same user friendly operation based on the same menu structure for all instruments.

The technical specifications are in accordance or exceed the requirements by the European and American Pharmacopeia and other worldwide standards (see page 4).

*The unique measuring principle with direct reading of the rotation angle, without mechanical transmission is resulting in guaranteed unmatched precision and fastest reading of the measuring values over the entire measuring range*



## Polarimeter N-Series

- The All-rounder amongst Polarimeter with continuous measurement
- Highest resolution of 0,01° / 0,05°Z with repeatability of  $\pm 0,01^\circ$  /  $\pm 0,05^\circ Z$  over the entire measuring range
- Short measuring time of  $\leq 4$  sec for standard liquid solutions
- Extremely long life time of the instrument combined with low maintenance costs resulting in excellent investment return
- Conform with international standards and is suited for QM

## Polarimeter M-Series

- Recognised "Standard" in numerous companies world wide, technical data just like N-Series, except:
- Highest resolution of 0,001° / 0,01°Z with repeatability of  $\pm 0,005^\circ$  /  $\pm 0,02^\circ Z$  over the entire measuring range
- Capable for Micro tubes
- Automatic wavelength calibration AWC

