

# Polartronic H532 & Aquisys

Pharmaceutical laboratory  
Polarimeter



**SCHMIDT + HAENSCH**

Opto-electronic measuring device since 1864

# Polarimeter H532 & Aquisys 2008

the **expert solution** by  
SCHMIDT+HAENSCH for the  
pharmaceutical industry



The pharmaceutical, research and development laboratories have increasing requirements concerning polarimeters resolution, precision and response.

Highest measurement precision and reproducibility at several wavelengths are basic preconditions. Fastest responses of the real measurement values are important for fulfilling real time measurement tasks in demanding applications like HPLC. The state of the art data management AQUISYS 2008 complying with 21 CFR Part 11 is the perfect completion for data acquisition, analysis and administration.

SCHMIDT+HAENSCH is the only producer of polarimeters that guarantee a constant precision over the entire measuring range. 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.

The Polarimeter Polartronic H532 uses the modular electronic and software platform by SCHMIDT+HAENSCH. 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).

## **Polarimeter Polartronic H-Series**

- High end polarimeter with continuous measurement
- Perfectly suitable for all applications requiring extremely high measurement performance for often changing samples/matters
- Combines highest resolution of  $0,0002^\circ$  with highest reproducibility of  $\pm 0,001^\circ$  over the entire measuring range
- Calibration-free due to spectral lamps light source
- Up to 5 fixed wavelengths
- Fast measurement - mea. time  $\leq 4$  sec. for standard solutions
- Conform to international standards and fully suitable for QM
- Robust metal housing
- Analytical measurement at multiple wavelengths (Autom. determination of the Optical Rotation dispersion ORD)
- Internal data memory

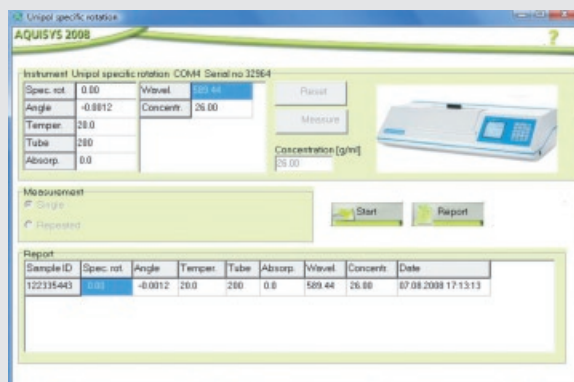


“Start window”, the basic functions at a glance  
 Intuitive user interface, user operation with configurable access authorisations, time limits for sessions of operation

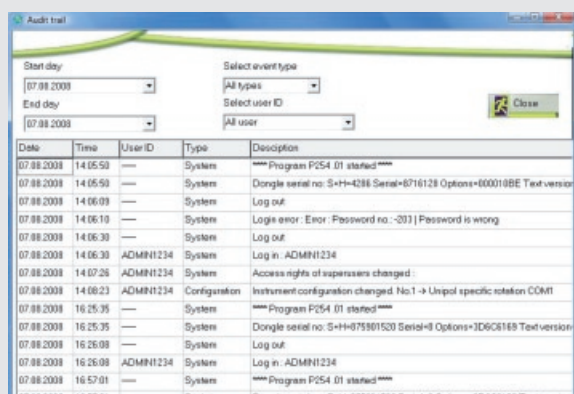
# A AQUISYS 2008

**Aquisys 2008 software is 21 CFR Part 11 compliant for SCHMIDT+HAENSCH's instruments**

- The integrated, though independent program “VALIDATE” checks the integrity of Aquisys before every run
- Remote operation of SCHMIDT+HAENSCH's laboratory instruments
- Audit trail function (history logging)
- Report generation
- Electronic signature which is unmistakably attributed to a person
- Encrypted electronic data storage and archiving
- User management with individually configurable access rights for every user
- The system is able to generate accurate and complete paper prints of the electronic records
- Logging of electronic recordings and modifications including user information as well as date and time stamp
- Explicit identification of the connected measuring instruments



Remote mode  
 Controlling of the polarimeter H532 via PC and display of the measuring results



Audit trail guarantees the traceability  
 Individual search filters



## Technical Data

Model	Polartronic H532
<b>Scale</b>	Optical Rotation, Intern. Sugar Scale, specific concentration, concentration %, user defined
<b>Measuring range</b>	± 360°, switchable
<b>Resolution</b>	0.0001° / 0.01°Z
<b>Precision</b>	± 0.002° / ± 0.01°Z over the entire measuring range
<b>Repeatability</b>	± 0.0003° in the range ±1° ± 0.001° / ± 0.01°Z
<b>Temperature accuracy</b>	0.03°C, autom. temperature correction
<b>Measuring time</b>	≤ 4° sec. for measuring of standard solutions over the entire measuring range
<b>Sensitivity</b>	up to OD 4.0
<b>Calibration</b>	Calibration free
<b>Light source</b>	Spectral lamps
<b>Wavelengths</b>	Up to 5 wavelengths fixed, possible are: 365, 405, 435, 546, 578, 589 nm
<b>Polarimeter tubes</b>	10 / 50 / 100 / 200 mm / Micro tubes
<b>Display / Operation</b>	Graphics-LCD 16 x 16 characters / alpha numerical keyboard
<b>Interfaces</b>	2x serial RS 232, 1x parallel, 1x PS2, 1x USB/Ethernet Converter (optional)
<b>Power supply</b>	Wide range power supply 90 - 265 V
<b>Dimensions / Weight</b>	735 x 175 x 425 mm (L x H x W), approx. 28 kg
<b>Standards</b>	European and American Pharmacopoeia, GLP/GMP documentation, O.I.M.L., Prepared for 21 CFR part 11 with a corresponding, optional software (Aquisys 2008)

**Applications** Polarimetric concentration, purity analysis and scientific analysis in the:

**Pharmaceutical industry**  
Enantiomers, chiral substances like soaps, amino acids, organic substances, glucose, fructose, purity control (codeine, cocaine, nictines, morphine sulfate), ascorbic acid, menthol, camphor, drug recognition, HPLC

**Medicine**  
Chiral metabolic compounds like sugar and albumin content in the urine, hormones, poison analyses, testosterones, enzymes and toxicology

**Chemical research**  
Analysis of optically active substances and structural analyses, inorganic ions in conjunction with optically active substances (e.g. -Bi, -Cd, -Cu, -Fe, -Hg), regulation of materials in solutions, organic substances, turpentine's, benzene, acids, esters etc.

Subject to modification without notice  
Änderungen vorbehalten  
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ISO 9001:2000

