

**L** LABORATORY

**P** PROCESS

**S** SOFTWARE

**A** AUTOMATION



**SCHMIDT  
HAENSCH**  
innovators by tradition since 1864

# Saccharomat®

Polarimeter

Worldwide unique  
calibration free sugar  
Polarimeter



## SPECIFICATIONS

## SACCHAROMAT® KEYBOARD

## SACCHAROMAT® TOUCH

Measurement scales	°Z International Sugar Scale	
Measuring ranges	- 35°Z to - 105°Z	
Resolution	0.01°Z	
Precision	± 0.01°Z*	
Reproducibility	± 0.01°Z	
Sensitivity	Up to OD 5	
Wavelength	1 or 2 wavelengths fixed: 587, 882 nm	
Measuring time	≤ 4 sec. over the entire measuring range	
Measuring tubes	Different models, 50, 100 or 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 regulation	Temperature regulation with external water bath (specifications vary by model) or with T-Cell Polarimeter tubes	
T-Cell range	+ 18° to + 40°C	
T-Cell resolution	0.01°C	
T-Cell precision	± 0.1°C	
Light source	LED, interference filter	
Display	Graphics LCD, 16 x 16 characters	7" TFT touchscreen, 800 x 480 pixel, 16 bit colors
Operation	Alpha numerical keyboard	Touchscreen (keyboard, mouse, barcode reader, remote via PC)**
Interface / Communication	RS232 (2x), parallel (1x), USB**	RS232 (1x), USB A (4x), USB B (1x), Ethernet (1x), W-LAN/LAN**
Standard models	Saccharomat Z 103; Z 103 P****: 587 nm Saccharomat Z 101; Z 101 P****: 882 nm Saccharomat Z 202; Z 202 P****: 587 + 882 nm	Saccharomat Z 103 TOUCH; Z 103 P****TOUCH: 587 nm Saccharomat Z 101 TOUCH; Z 101 P****TOUCH: 882 nm Saccharomat Z 202 TOUCH; Z 202 P****TOUCH: 587+882 nm
Conformity	International Pharmacopoeia, OIML, ASTM, ICUMSA, Australian Standard K157	

## Highlights

High performance sugar Polarimeter using the unique principle of quartz wedge compensation; Saccharomat does not need re-calibration at any time; high stability of the measuring values; measurement of dark samples after filtration with Autofilt Z; direct coupling with Refractometer Head ATR-P for purity calculation



## Polarimeter applications

Determination of sucrose concentration.

Precision and reproducibility of the measured values meet the high requirements of quality control and payment systems.

## Applications often used

- Determination of concentration
- Purity analysis
- Quality control

## Typical applications of the model

- Sugar industry (raw-, intermediate and final products of sugar cane and beet processing)
- Food industry (reception control of sucrose)
- Pharmaceutical industry (reception control of sucrose)

\* Standard conditions (589 nm, 20°C)

\*\* Optional

\*\*\* Certificate on request

\*\*\*\* P-version for T-Cell tubes

