

# PS8000 -Series

## High-Speed Sugar Polarimeter

### **Sugar Industry**

- Quality control of intermediate and end products
- Control of glucose and fructose

### **Food Industry**

- Control of concentration
- Purity control
- Quality control



The new A. KRÜSS Optronic Sugar Polarimeter has a novel measuring principle for optically-active liquids. This latest development reduces the measuring time to one second, irrespective of the angle of a sample.



***Innovation since 1796***

# PS8000 and PS8000T

## the fastest sugar polarimeters worldwide!

The PS8000 is a fast, high-precision polarimeter especially designed for application in the sugar industry. The short measuring time of one second enables swift measurements. All settings are made via an easy-to-operate touch screen. The instantly-accessible „HELP“ function makes operation even easier. Readout of measurements is in international sugar scale. The angle of rotation is also shown for further information. Readout of the international sugar scale is possible in samples of different weight. Besides the standard 26g, weighted samples of 13g and 6.5g are also possible.

Measurements can be made with temperature compensation. Constant-temperature measurement cells are also available.

The internal memory of the PS8000 stores the last 100 measurements for instant and complete printout. After measurement every single value is printable or transferable to a PC via an RS 232 interface.

Menu-driven calibration with quartz is easily accomplished by the user.



Simple entry over display keyboard and pull-down menus



## Benefits

- Swift sample throughput
- Self-explanatory touchscreen
- Clearly-arranged readout of all important measuring data
- Spot-on and reliable accuracy
- Storage of all measurements
- RS-232 connection for PC and printer

## Main Display

All measuring parameters are shown on this display

- Optical rotation (°Z)
- Concentration
- Cell temperature
- Thermostat temperature
- Cell length
- Wavelength
- Sample number
- Status information
- Date and time

## Selection

- Sample name
- Comment
- Cell length
- Wavelength
- Measurement unit (°Z)
- Specific rotation
- Calibration
- Language (German, English, Spanish)

Accessories	Length in mm	Volume	Catalog number
	100 200	8.0 18.0	P1000-100 P1000-200
Cell with air bubble trap			
	50.00 95.04 100.00 190.09 200.00	3.0 5.5 6.0 11.0 12.0	P8-50E P8-95E P8100E P8190E P8-200E
Cell with center well			
	50 100 200	10.0 12.0 17.0	P8-50ET P8-100ET P8-200ET
Jacketed cell, temperature-controlled			
	40 50 100 200	8.0 10.0 12.0 17.0	P8-40ETT P8-50ETT P8-100ETT P8-200ETT
Jacketed cell, temperature controlled and PT-100 sensor			
	100 200	12.0 17.0	P1000-D100 P1000-D200
Flow-thru cell with funnel and exit tubing			
	100 200	12.0 17.0	P8-100DT P8-200DT
Flow-thru jacketed cell with funnel and exit tubing, temperature controlled			
	50 100 200	10.0 12.0 17.0	P8-50DS P8-100DS P8-200DS
Flow-thru cell with hose connection			
	50 100 200	10.0 12.0 17.0	P8-50DST P8-100DST P8-200DST
Flow-thru jacketed cell with hose connection, temperature-controlled			
	50 100 200	10.0 12.0 17.0	P8-50DSTT P8-100DSTT P8-200DSTT
Flow-thru jacketed cell with hose connection, temperature-controlled and PT-100 sensor			
	50 100	0.55 1.10	P8-50M P8-100M
Micro cell			
	10	1.5	P8-10MD
Flow-thru micro cell			
Flow-thru micro cell	2.5	0.2	P8-2MD
Flow-thru micro cell, temperature-controlled	2.5	0.2	P8-2MDT
	Single quartz control plate (°Z): -30, +25, +45, +50, +75, +95, +99, (+/-1°Z)		P1000-400
Quartz control plate with certification			
		other rotation angle (°, °Z) (please contact us!)	

## PS8000 and PS8000T

### Technical Data

	PS8000	PS8000T
Measurement range	$\pm 259^{\circ}\text{Z}$	$\pm 259^{\circ}\text{Z}$
Resolution	$0.01^{\circ}\text{Z}$	$0.01^{\circ}\text{Z}$
Accuracy	$\pm 0.01^{\circ}\text{Z}$	$\pm 0.01^{\circ}\text{Z}$
Measurement unit	Angle ( $^{\circ}\text{Z}$ )	Angle ( $^{\circ}\text{Z}$ )
Measurement mode	Int. Sugar Scale	Int. Sugar Scale
Reproducibility	$0.02^{\circ}\text{Z}$	$0.02^{\circ}\text{Z}$
Meas. time $\pm 90^{\circ}$	1 sec	1 sec
Calibration	automatic (menu-driven)	automatic (menu-driven)
Data store	100 Measurements	100 Measurements
Display	LCD 5.7" 320x240 Pixel monochrome	LCD 5.7" 320x240 Pixel monochrome
Interfaces	RS232 USB (optional)	RS232 USB (optional)
Operating	Touchscreen	Touchscreen
Working voltage	100...250V ~ 50/60Hz	100...250V ~ 50/60Hz

	PS8000	PS8000T
Light source	1 LED with filter	1 LED with filter
Wavelength	589nm (others optional)	589nm (others optional)
Wavelength range	one fixed wavelength	one fixed wavelength
Max. cell length	220nm	220nm
Sensitivity	min 0.1% (OD3)	min 0.1% (OD3)
Connection for temperature sensor	Special cell with PT100 sensor necessary	Special cell with PT100 sensor necessary
Temp. measurement	0...99.9°C	0...99.9°C
Temp. resolution	0.1°C	0.1°C
Temp. accuracy	$\pm 0.2^{\circ}\text{C}$	$\pm 0.2^{\circ}\text{C}$
Temp. measuring point	Cell	Cell
Thermostat	-	Peltier thermostat with water
Temperature range	-	15...40.0°C
Temp. accuracy	-	$\pm 0.2^{\circ}\text{C}$

## The benefits at a glance



- Swift sample throughput



- Self-explanatory touch screen



- Clearly-arranged readout of all important measuring data



- Spot-on and reliable accuracy



- Storage of all measurements



- RS-232 interface for PC and printer