„High-Speed" Polarimeter P8000 Series

Our new **A. KRÜSS Optronic 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. It can be used in the following areas of application:

Pharmaceutical Industry

- Monitoring of chemical processes
- Purity control and regulation of concentrations

Chemical Industry

- Purity control and regulation of concentrations
- Analysis of optically active components (qualitative und quantitative)
- Control of configuration changes
- Monitoring of chemical processes

Sugar Industry

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

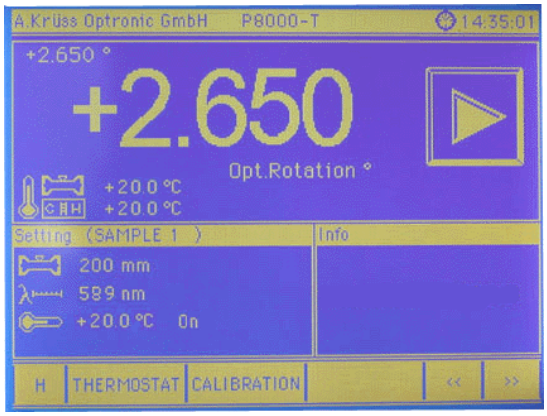
Food Industry

- Control of concentrations
- Purity control
- Quality control

P8000 Series

- Self explanatory touch screen
- Spot-on and reliable accuracy
- RS-232 connection for PC and printer
- Clearly-arranged readout of all important measuring data

Do you really like to read manuals?



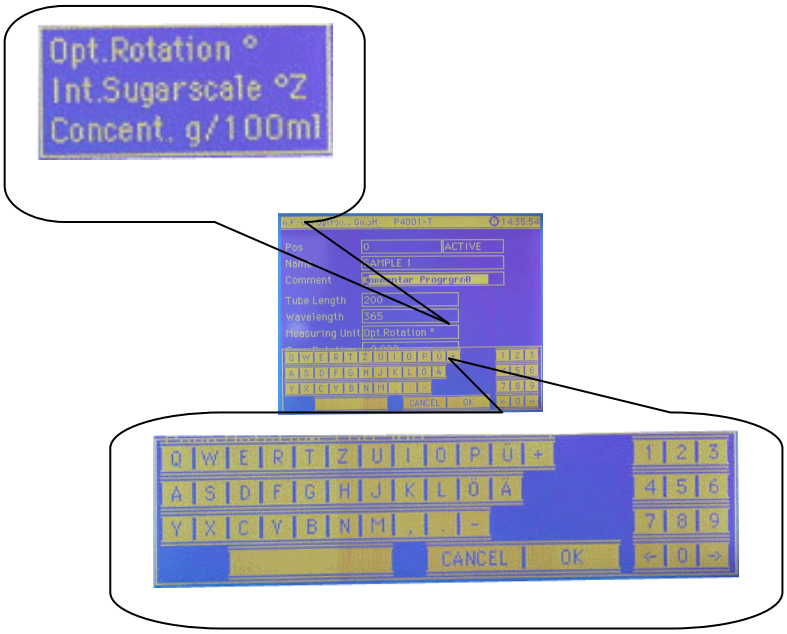
Main Display
All measuring parameters are shown on this display.

- Optical rotation [°]
- Optical rotation [°Z]
- Concentration [g/ml]
- Cell temperature
- Thermostat temperature
- Cell length
- Wavelength
- Sample number
- Status information
- Date and time

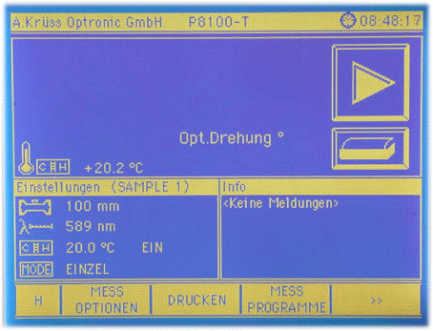
Selection

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

Simple entry via display keyboard and pull-down menus.



Start ⇒ to ⇒ Result



⇒

only 1 second

Sample Cell

	Length in mm	Volume	Catalog number
 Cell with air-bubble trap	100 200	8,0 18,0	P1000-100 P1000-200
 Cell with center well	50 95,04 100 190,09 200	3,0 5,5 6,0 11,0 12,0	P8-50E P8-95E P8-100E P8-190E P8-200E
 Jacketed cell, temperature-controlled	50 100 200	10,0 12,0 17,0	P8-50ET P8-100ET P8-200ET
 Jacketed cell, temperature-controlled and PT-100 sensor	40 50 100 200	8,0 10,0 12,0 17,0	P8-40ETT P8-50ETT P8-100ETT P8-200ETT

Flow-Thru

 Flow-tru cell with funnel and exit tubing	100 200	12,0 17,0	P1000-D100 P1000-D200
 Flow-thru jacketed cell with funnel and exit tubing, temperature-controlled	100 200	12,0 17,0	P8-100DT P8-200DT
 Flow-thru cell with hose connection	50 100 200	10,0 12,0 17,0	P8-50DS P8-100DS P8-200DS
 Flow-thru jacketed cell with hose connection, temperature-controlled	50 100 200	10,0 12,0 17,0	P8-50DST P8-100DST P8-200DST
 Flow-thru jacketed cell with hose connection, temperature-controlled and PT-100 sensor	50 100 200	10,0 12,0 17,0	P8-50DSTT P8-100DSTT P8-200DSTT

Micro

 Micro cell	50 100	0,55 1,10	P8-50M P8-100M
 Flow-thru micro cell	10	1,5	P8-10MD
Flow-thru micro cell	2,5	0,2	P8-2MD
Flow-thru micro cell, temperature-controlled	2,5	0,2	P8-2MDT

Quartz

 Quarz control plate with certification	Single quartz control plate[°Z]: -30, +25, +45, +50, +75, +95, +99 (± 1°Z)	P1000-400
	For other rotation angle [°, °Z], please contact us.	

Special Design

If this selection of polarimeter cells and quartz standards does not meet your requirements, please contact us.

	P8000	P8000-T	P8100	P8100-T	P8200	P8200-T
Measurement mode	Optical rotation Int. sugar scale Concentration User defined	Optical rotation Int. sugar scale Concentration User defined	Optical rotation Int. sugar scale Concentration User defined	Optical rotation Int. sugar scale Concentration User defined	Optical rotation Int. sugar scale Concentration User defined	Optical rotation Int. sugar scale Concentration User defined
Measurement range	±90° ±259°Z 0...99.9g/ml	±90° ±259°Z 0...99.9g/ml	±90° ±259°Z 0...99.9g/ml	±90° ±259°Z 0...99.9g/ml	±90° ±259°Z 0...99.9g/ml	±90° ±259°Z 0...99.9g/ml
Measurement unit	Angle [°, °Z] Conc. [g/100ml] User defined	Angle [°, °Z] Conc. [g/100ml] User defined	Angle [°, °Z] Conc. [g/100ml] User defined	Angle [°, °Z] Conc. [g/100ml] User defined	Angle [°, °Z] Conc. [g/100ml] User defined	Angle [°, °Z] Conc. [g/100ml] User defined
Resolution	0.001° 0.01°Z 0.1g/ml	0.001° 0.01°Z 0.1g/ml	0.001° 0.01°Z 0.1g/ml	0.001° 0.01°Z 0.1g/ml	0.001° 0.01°Z 0.1g/ml	0.001° 0.01°Z 0.1g/ml
Accuracy	±0.003° ±0.01°Z ±0.5g/100ml	±0.003° ±0.01°Z ±0.5g/100ml	±0.002° ±0.01°Z ±0.5g/100ml	±0.002° ±0.01°Z ±0.5g/100ml	±0.002° ±0.01°Z ±0.5g/100ml	±0.002° ±0.01°Z ±0.5g/100ml
Reproducibility	0.002°	0.002°	0.002°	0.002°	0.002°	0.002°
Meas. Time ±90°	1sec	1sec	1sec	1sec	1sec	1sec
Light source	LED with filter 589 nm	LED with filter 589 nm	LED with filter 589 nm	LED with filter 589 nm	LED with filter 589 nm	LED with filter 589 nm
Wavelength	589nm others optional	589nm others optional	589nm others optional	589nm others optional	Several wavelengths available on request	Several wavelengths available on request
Wavelength range	One fixed wavelength	One fixed wavelength	One fixed wavelength	One fixed wavelength	Automatic by pull-down menu	Automatic by pull-down menu
Connection for temperature sensor	Special cell with PT100 sensor necessary	**Special cell with PT100 sensor necessary**	**Special cell with PT100 sensor necessary**	**Special cell with PT100 sensor necessary**	Special cell with PT100 sensor necessary	Special cell with PT100 sensor necessary
Temperature measurement	0...99.9°C	0...99.9°C	0...99.9°C	0...99.9°C	0...99.9°C	0...99.9°C
Temperature resolution	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
Temperature accuracy	±0.2°C	±0.2°C	±0.2°C	±0.2°C	±0.2°C	±0.2°C
Measurement point of temperature probe	Cell	Cell	Cell	Cell	Cell	Cell
Thermostat	-	**Peltier-Thermostat with water**	-	**Peltier-Thermostat with water**	-	Peltier-Thermostat with water
Temperature range	-	15...40.0°C	-	15...40.0°C	-	15...40.0°C
Temperature accuracy	-	±0.2°C	-	±0.2°C	-	±0.2°C
Max. cell length	Up to 200mm length	Up to 200mm length	Up to 200mm length	Up to 200mm length	Up to 200mm length	Up to 200mm length
Transmissibility of samples	min 0.1% (OD3)	min 0.1% (OD3)	min 0.1% (OD3)	min 0.1% (OD3)	min 0.1% (OD3)	min 0.1% (OD3)
Calibration	Automatic (menu-driven)	Automatic (menu-driven)	Automatic (menu-driven)	Automatic (menu-driven)	Automatic (menu-driven)	Automatic (menu-driven)
Display	LCD 5.7" 320x240 Pixel, monochrome	LCD 5.7" 320x240 Pixel, monochrome	LCD 5.7" 320x240 Pixel, monochrome	LCD 5.7" 320x240 Pixel, monochrome	LCD 5.7" 320x240 Pixel, monochrome	LCD 5.7" 320x240 Pixel, monochrome
Operating	Touch-Display	Touch-Display	Touch-Display	Touch-Display	Touch-Display	Touch-Display
Data store	100 Measurement	100 Measurement	100 Measurement	100 Measurement	100 Measurement	100 Measurement
Interface	RS232 USB (optional)	RS232 USB (optional)	RS232 USB (optional)	RS232 USB (optional)	RS232 USB (optional)	RS232 USB (optional)
Working voltage	100V...250V~ 50/60Hz	100V...250V~ 50/60Hz	100V...250V~ 50/60Hz	100V...250V~ 50/60Hz	100V...250V~ 50/60Hz	100V...250V~ 50/60Hz

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