

”High-Speed” Polarimeter P8000 Series



The new A. KRÜSS OPTRONIC Polarimeter has a novel measuring principle for optical activity 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 concentration



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



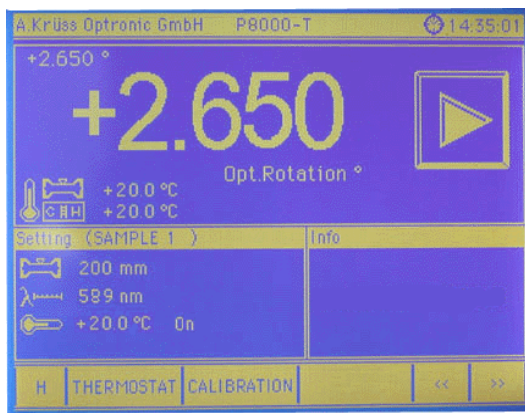
Food Industry

- Control of concentration
- Purity control
- Quality control

Do you really like to read manuals?

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



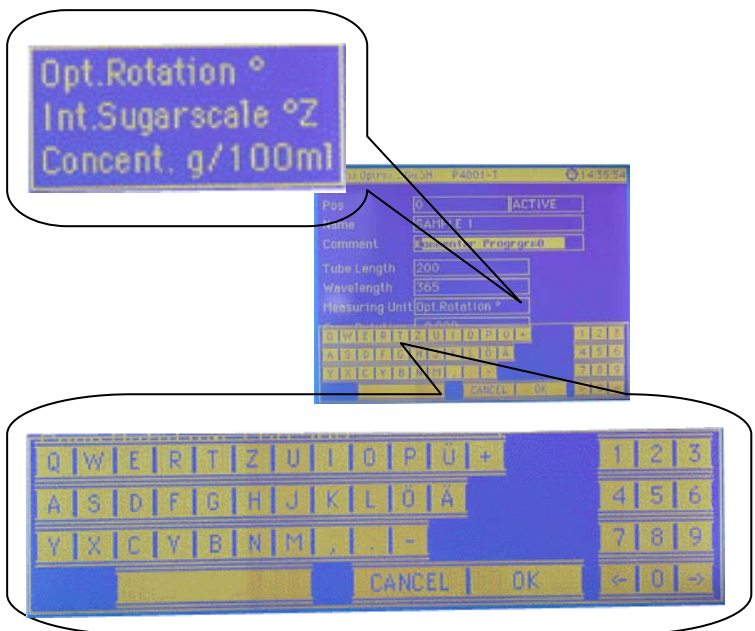
Main Display

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

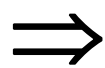
Selection

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

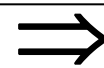


Simple entry over display keyboard and pull-down menus.

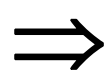
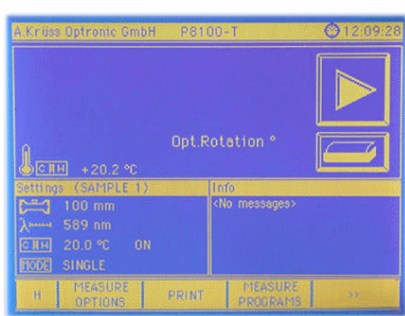
Start



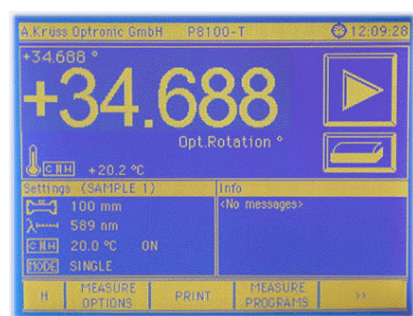
to







Result






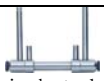

only 1 second





Sample Cell

	Length in mm	Volume	Catalog number
 Cell with air bubble trap	100	8.0	P 1000-100
	200	18.0	P 1000-200
 Cell with center well	50	3.0	P 8-50E
	95.04	5.5	P 8-95E
	100	6.0	P 8-100E
	190.09	11.0	P 8-190E
	200	12.0	P 8-200E
 Jacketed cell, temperature-controlled	50	10.0	P 8-50ET
	100	12.0	P 8-100ET
	200	17.0	P 8-200ET
 Jacketed cell, temperature-controlled and PT-100 sensor	40	8.0	P 8-40ETT
	50	10.0	P 8-50ETT
	100	12.0	P 8-100ETT
	200	17.0	P 8-200ETT


Flow-Through

 Flow-through cell with funnel and exit tubing	100	12.0	P 1000-D100
	200	17.0	P 1000-D200
 Flow-through jacketed cell with funnel and exit tubing, temperature-controlled	100	12.0	P 8-100DT
	200	17.0	P 8-200DT
 Flow-through cell with hose connection	50	10.0	P 8-50DS
	100	12.0	P 8-100DS
	200	17.0	P 8-200DS
 Flow-through jacketed cell with hose connection, temperature-controlled	50	10.0	P 8-50DST
	100	12.0	P 8-100DST
	200	17.0	P 8-200DST
 Flow-through jacketed cell with hose connection, temperature-controlled and PT-100 sensor	50	10.0	P 8-50DSTT
	100	12.0	P 8-100DSTT
	200	17.0	P 8-200DSTT

Micro

 Micro cell	50	0.55	P 8-50M
	100	1.10	P 8-100M
 Flow-through micro cell	10	1.5	P 8-10MD
Flow-through micro cell	2.5	0.2	P 8-2MD
Flow-through micro cell, temperature-controlled	2.5	0.2	P 8-2MDT

Quartz

 Quartz control plate with certification	Single quartz control plate [°Z]: -30; + 25; + 45; + 50; + 75; + 95; + 99 (± 1°Z)	P 1000-400
	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	Tungsten- Halogen 6V with Filter 589nm	Tungsten- Halogen 6V with Filter 589nm	Tungsten- Halogen 6V with Filter 589nm	Tungsten- Halogen 6V with Filter 589nm	Tungsten- Halogen 6V with Filter 589nm	Tungsten- Halogen 6V with Filter 589nm
Wavelength	589nm others optional	589nm others optional	589nm others optional	589nm others optional	365nm,405nm, 436nm,546nm, 589nm,633nm	365nm,405nm, 436nm,546nm, 589nm,633nm
Wavelength range	One fixed wavelength	One fixed wavelength	One fixed wavelength	One fixed wavelength	Automatic by pull-down menu	Automatic by pull-down menu
Temperature sensor	PT100	PT100	PT100	PT100	PT100	PT100
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
Temperature measure. point	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
Sensitivity	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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DIN EN ISO 9001:2000

A. KRÜSS OPTRONIC GmbH - one of the TOP 100 in innovation!

