

TECHNICAL DATA - POLARIMETERS

	P8000	P8100	P8000-T/-T80/-TF	P8100-T/-T80/-TF
SCALES	Optical rotation [°] Int. sugar scale [°Z] Concentration [g/100 ml] Spec. rotation User-defined		Optical rotation [°] Int. sugar scale [°Z] Concentration [g/100 ml] Spec. rotation User-defined	
MEASUREMENT RANGES	±90° ±259 °Z		±90° ±259 °Z	
ACCURACY	±0.003° ±0.01 °Z	±0.002° ±0.01 °Z	±0.003° ±0.01 °Z	±0.002° ±0.01 °Z
RESOLUTION	0.001° 0.01 °Z		0.001° 0.01 °Z	
MEASUREMENT PERIOD ±90°	Ca. 1 s		Ca. 1 s	
LIGHT SOURCE	1 LED mit Filter		1 LED mit Filter	
WAVELENGTH	589 nm		589 nm	
SAMPLE PERMEABILITY	> 0.1 % (OD3)		> 0.1 % (OD3)	
MAX. TUBE LENGTH	220 mm		220 mm	
TEMPERATURE MEASUREMENT	With temperature probe PRT-E oder PRT-T		With temperature probe PRT-E oder PRT-T	
TEMPERATURE MEASUREMENT RANGE	0–99.9 °C		0–99.9 °C	
TEMPERATURE MEASUREMENT RESOLUTION	0.1 °C		0.1 °C	
TEMPERATURE MEASUREMENT ACCURACY	±0.2 °C		±0.2 °C	
TEMPERATURE CONTROL	Can be retrofitted (requires circulating thermostat PT31 or PT80, sample chamber bushing P8020 and temperature-controlled measurement tube PRG-100- ET)		With circulating thermostat PT31 (P8000-T) or with circulating thermostat PT80 (P8000-T80) (requires temperature-controlled measurement tube such as PRG-100-ET)	
TEMPERATURE CONTROL RANGE			PT31=8°–35° C (standard), PT80=5°–80° C	
TEMPERATURE CONTROL ACCURACY			±0.2 °C	
METHODS	A practically unlimited number of methods can be set			
ADJUSTMENT	Automatic (menu-driven)			
HOUSING	Steel, powder-coated			
CONTROL	5,7" touch-screen, 640 x 480 pixels			
INTERFACES	1x USB, 1x RS-232, 1x Ethernet			
OPERATING VOLTAGE	110–250 V, 50/60 Hz			
POWER CONSUMPTION (MEASUREMENT OPERATION)	35 W		35 W	
POWER CONSUMPTION (MAX.)	50 W		50 W	
DIMENSIONS (W X H X D)	645 mm x 200 mm x 360 mm			
WEIGHT	28 kg			

P8000-P		P8100-P	P3000	P1000-LED	
Optical rotation [°] Int. sugar scale [°Z] Concentration [g/100 ml] Spec. rotation User-defined			Optical rotation [°] Int. sugar scale [°Z]	SCALE	Optical rotation [°]
±90° ±259 °Z			±90° ±259 °Z	MEASUREMENT RANGE	2 graduated circles (0–180°)
±0.003° ±0.01 °Z	±0.002° ±0.01 °Z		±0,01° ±0,01 °Z	SCALE DIVISION	1°
0.001° 0.01 °Z			0.01° 0.01 °Z	READING ACCURACY	0.05° (with nonius)
Ca. 1 s			Ca. 1 s	LIGHT SOURCE	1 LED with filter
1 LED mit Filter			1 LED mit Filter	WAVELENGTH	589 nm
589 nm			589 nm	MAX. TUBE LENGTH	220 mm
> 0.1% (OD3)			> 0.1% (OD3)	ADJUSTMENT	Manual adjustment on the scale
220 mm			220 mm	HOUSING	Cast aluminium
With measurement tube PRG-100-EPT			With temperature probe PRT-E or PRT-T	OPERATING VOLTAGE	110–250 V, 50/60 Hz
0–99.9 °C			0–99.9 °C	POWER CONSUMPTION (MEASUREMENT OPERA- TION)	15 W
0.1 °C			0.1 °C	POWER CONSUMPTION (MAX.)	15 W
±0.2 °C			±0.2 °C	DIMENSIONS (W X H X D)	140 mm x 330 mm x 500 mm
With measurement tube PRG-100-EPT with 3 integrated Peltier elements			Can be retrofitted requires circulating thermostat PT31 or PT80, sample chamber bushing P8020 and temperature-controlled measurement tube PRG-100-ET	WEIGHT	4.3 kg
15–40 °C			N/a		
±0.2 °C			Automatic (menu-driven)		
			Steel, powder-coated		
			3,5" touch-screen, 320 x 240 pixels		
			1x RS-232		
			110–250 V, 50/60 Hz		
65 W			30 W		
85 W			40 W		
			645 mm x 200 mm x 360 mm		
			28 kg		