PolAAr 32 / PolAAr 3002
Series Polarimeters

Specification	PolAAr 32	PolAAr 3002
Scales	Angular degrees, ISS (°Z), temperature corrected ISS, specific rotation, concentration, 10 user programmable scales, apparent sugar purity if connected to an Index Instruments refractometer	Angular degrees, ISS (°Z), temperature corrected ISS, specific rotation, concentration, 10 user programmable scales, apparent sugar purity if connected to an Index Instruments refractometer
Range	Full circle, reading to ±90 angular degrees, in excess of ±250°Z	Full circle, reading to ±90 angular degrees, in excess of ±250°Z
Resolution	0.01°, 0.01°Z	0.001°, 0.01°Z
Accuracy	±0.01°, ±0.02°Z	±0.001° (0 to 10°) ±0.01° (10 to 90°) ±0.01°Z (0 to 25°Z) ±0.02°Z (above 25°Z)
Wavelengths	589.44nm and 546.22nm[1]	589.44nm and 546.22nm[1]
Light Source	20 watt tungsten halogen lamp, typical life 2000 hours	20 watt tungsten halogen lamp, typical life 2000 hours
OD Tolerance	OD 3.0 (ie 99.9% absorbance), warning issued if sample too dark	OD 3.0 (ie 99.9% absorbance), warning issued if sample too dark
Reading Time (continuous mode)	10 seconds	Approximately 10 to 15 seconds
Reading Modes	Continuous, autoprint, one shot and lock, or read when stable	Continuous, autoprint, one shot and lock, or read when stable
Sample Compartment	Accepts standard sample tubes, 30mm diameter collars. Maximum path length 200mm, bores 8mm down to 1.5mm. Ventilated - temperature rise above ambient does not exceed 3°C	Accepts standard sample tubes, 30mm diameter collars. Maximum path length 200mm, bores 8mm down to 1.5mm. Ventilated - temperature rise above ambient does not exceed 3°C
Thermometers	Temperature sensor in sample compartment, socket for alternative sample tube sensor. Sensor range 0-100°C, accuracy ±0.25°C. Digital display resolution 0.1°C	Temperature sensor in sample compartment, socket for alternative sample tube sensor. Sensor range 0-100°C, accuracy ±0.25°C. Digital display resolution 0.1°C
Outputs/inputs	2 x RS232 (25-way D sockets), 1 x remote (9-way D socket)	2 x RS232 (25-way D sockets), 1 x remote (9-way D socket)
Data Output	Rotation reading, units, time and date, polarimeter serial number, wavelength, temperature, pre-set parameters, sample number	Rotation reading, units, time and date, polarimeter serial number, wavelength, temperature, pre-set parameters, sample number
Features	21 CFR Part II Compliant Data Averaging facility Data Storage for up to 100 measurements	21 CFR Part II Compliant Data Averaging facility Data Storage for up to 100 measurements
Special Features	User selection and definition of output parameters for GLP (Good Laboratory Practice), in addition to the standard data output, up to 6 user defined sample identifiers	User selection and definition of output parameters for GLP (Good Laboratory Practice), in addition to the standard data output, up to 6 user defined sample identifiers
Controls	Power ON/OFF, alpha-numeric keypad, plus function keys including print, zero and scale selection	Power ON/OFF, alpha-numeric keypad, plus function keys including print, zero and scale selection
Calibration	UKAS calibration certificate available if required	UKAS calibration certificate available if required
Size and Weight	L 515mm, D 380mm, H 198mm, W 15.7kg	L 515mm, D 380mm, H 198mm, W 15.7kg

[1] Other wavelength options available