

# 4500 System Specifications

12/1/2017

Base Station	Light source	670 nm
	Detection speed	4 ms
	Incident angles	40-47 Deg (gas) 67-81 Deg (liquid)
	Baseline noise	< 0.06 RU RMS (0.01 mDeg RMS)
	Baseline drift	0.30 RU/hr (0.05 mDeg/hr) (when ambient drifts < 1°C/hr)
	Temperature Control Range	6°C to 50°C (10°C below ambient temperature max)
	Outer dimension	355(w) x 250 (h) x 515 (d) mm
	Weight	11.5 kg
	Power supply	110-230 V 50/60 Hz
Fluid Handling	Number of sample flow channels	5 channels
	Flow cell material	PEEK (biologically compatible)
	Flow rate	1.0 to 250 µL/min (application dependent)
	Sample injection volume	>50 µL (application dependent)
	Sample injection methods	Fully automated (Autosampler option) Semi-automated
	Kinetic constant	$k_a < 1 \times 10^8 \text{ M}^{-1}\text{s}^{-1}$ $k_d > 1 \times 10^{-6} \text{ s}^{-1}$
	Dissociation constant	$K_D = 10^{-3} \text{ M (1 mM) to } 10^{-12} \text{ M (1 pM)}$
	Molecular weight cutoff	100 Da
Control System	Computer	Windows operating system
	Software	BI-SPR software including Data Analysis and Kinetics Analysis packages
Autosampler (option)	Sample capacity	2 x SBS standards (384 / 96), 2 x 48 Vials (1.5mL), 2 x 12 Vials (10mL)
	Sample cooling	Minimum: 4°C +/- 2°C
	Outer dimension	300 (w) x 575 (h) x 360 (d) mm
	Weight	21 kg
Automatic Buffer Exchange Pump and Degasser (option)	Buffer exchange	Automatic buffer exchange up to six sources
	Buffer degasser	In-line
	Buffer delivery	Continuous
	Outer dimension	305 (w) x 191 (h) x 330 (d) mm
	Weight	6.8 kg

Product specification and descriptions in this document are subject to change without notice.