

# ABS2™ specifications

Sample collection options	Sarstedt Microvette and similar size tubes
Fraction collector type	Rotary, 10 position; additional samples can be collected once initial samples are removed
Sample storage temperature	4-6° C, displayed on control screen in real-time
Maximum number of sampling time points	20
Maximum duration of sampling session	Unlimited
Collection modes	Low Loss, No Low Loss, DBS Low Loss, DBS No Low Loss, Large Animal, Bile Collection
Auto-retry routine	Skips to next sample if user settable number of retries fail to pull in blood
KVO feature for catheter patency	Adjustable rate; 5 µL per pulse
Push-before-pull volume for catheter patency	Adjustable from 0-50µL
Time to take one sample	Varies based on catheter and tubing volume and parameter settings (typically 3-5 min)
Sample volume	Adjustable for each time point
Minimum sample volume	10 µL
Sample volume accuracy	+/- 10 µL typical; can be optimized to +/- 3 µL on microsamples
Maximum sample volume	No limit, vial dependent
Max # of 100µL samples from a rat <sup>1</sup>	33
Max # of 15µL samples from a mouse <sup>1</sup>	18
Sample dilution	None
Recommended IV fluid	Normal saline with 10-20 units heparin per ml
Volume of blood withdrawn per sample	Sample volume plus typically 40-80µL; all but sample volume plus 2-4µL returned to animal; sampled blood volume replaced with IV fluid
Tee blood sensors	Electrical impedance technology
Syringe pump integration	Can start and monitor Harvard Apparatus Model 11 Elite pumps for IV dosing
Computer system requirements	PC or laptop with Windows 7, Windows 10 OS
Maximum samplers per computer	12
Communication method	USB via RS-232 converter
Communication cable length	6ft (1.8m) standard; other lengths may be ordered
Power supply	12VDC, 5A; 100-240 VAC input, 47-63 Hz
Power consumption	Less than 50W per unit, excluding computer; UPS recommended
Weight	5 kg (11lbs)
Dimensions (WxDxH)	20 x 25 x 13 cm (8 x 10 x 5 in)

<sup>1</sup> Based on limit of 15% of animal's blood volume from NIH Guidelines for Survival Bleeding of Mice and Rats (Feb 2001). Assumptions: blood volume of 22 ml in 350g rat, 2.2 ml in 30g mouse; trim loss of 3 µL in Low Loss mode.