

BioFusion S500 Series

S500/S500 Pro/S500 Neo/S500 Ex Infusion Pump



Physical Specifications

Size	214mm×153mm×75mm (L×W×H)
Weight	≤1.60kg
Screen	3.5 inch TFT LCD capacitive touchscreen
Resolution	800×480 pixels
Brightness	1-10 levels adjustable
Display	Patient information, Alarm information Infusion status, system status
Ingress Protection	IP33

Parameters Specifications

Accuracy	Flow rate error $\leq \pm 0.5\%$ Bolus volume error $\leq \pm 5\%$, or $\pm 0.02\text{ml}$ (whichever is the greater) KVO error $\leq \pm 5\%$ Drip rate error $\leq \pm 10\%$
Flow rate setting	Range 0.10ml/h ~ 2350ml/h Flow rate increment setting: (0.10 ~ 99.99) ml/h increment 0.01ml/h (100.0 ~ 999.9) ml/h increment 0.1ml/h (1000 ~ 2350) ml/h increment 1ml/h
Bolus rate (Automatic or Manual)	Range 0.10ml/h ~ 2350ml/h (0.10 ~ 99.99) ml/h increment 0.01ml/h (100.0 ~ 999.9) ml/h increment 0.1ml/h (1000 ~ 2350) ml/h increment 1ml/h
Occlusion detection	15 levels selectable, (respectively are 50, 150, 225, 300, 375, 450, 525, 600, 675, 750, 825, 900, 975, 1050, 1125mmHg). Occlusion alarm error: First level: 50^{+70}_{-45} mmHg Other levels: $\leq \pm 145\text{mmHg}$ or $\pm 20\%$ (Whichever is the greater)
Maximum infusion pressure	No more than 1350mmHg
Single air detection	BioFusion S500: 7 levels selectable, (respectively are 25, 50, 100, 200, 400, 600, 800 ul) BioFusion S500 Pro, BioFusion S500 Neo, BioFusion S500 Ex: 8 levels selectable, (repectively are 15, 25, 50, 100, 200, 400, 600, 800ul)
Accumulated air bubble	7 levels selectable, accumulated bubble in 15mins are 100, 200, 400, 500, 600, 800, 1000ul respectively
Maximum volume (single fault conditions)	$\leq 0.5\text{ml}$
KVO rate	0.10~30.00ml/h, increment 0.01ml/h
Time set range	00:00:01 ~ 99:59:59 (h:min:sec) increment 1s
VTBI set range	0.10~9999.99ml, increment 0.01ml
Accumulated volume	0.00~99999.99ml, increment 0.01ml

Drip rate set range	1~400dot/min
Weight set range	0.1 to 499.0kg Units: kg,lb
Dose rate set range	0.001~99999 Units:X/min, X/h, X/24h, X/kg/min, X/kg/h, X/kg/24h, X/lb/min, X/lb/h, X/lb/24h, X can represent the units of ng, ug, mg, g, mU, U, kU, EU, mmol, mol, mcal, cal, kcal, mEq
Dosage	Setup range 0.001~99999 Units: ng, ug, mg, g, mU, U, kU, EU, mmol, mol, mcal, cal, kcal, mEq
Volume range	0.1~9999.99ml
Concentration	Setup range 0.001~9999.99 Units: ng/ml, ug/ml, mg/ml, g/ml, mU/ml, U/ml, KU/ml, EU/ML, mmol/ml, mol/ml, mcal/ml, cal/ml, kcal/ml, mEq/ml
Drug library	More than 5000 drugs, 30 categories, up to 20 types color-coding drug name.
Patient history data	More than 5000 events (BioFusion S500) More than 6000 events (BioFusion S500 Neo) More than 8000 events (BioFusion S500 Ex) More than 10000 events (BioFusion S500 Pro)
Auto lock Protection	
Screen lock protection	Non-infusion state: Default 3 min. 1min, 2min, 3min, 4min, 5min,and off selectable. Infusion state: Default 30s. 15s, 30s,1min, 2min, 3min, 4min, 5min, and off selectable.
Alarm	
Type	Audible and visual alarm
3 levels	High: Air in line/ Accumulated air/ Empty/ Drop error/ Upstream occlusion/ downstream occlusion / No infusion tube/infusion tube error/ No drop sensor/ No battery/ VTBI complete/ KVO finish/ Relay invalid/ System error/ Middle: Near Occlusion/ CMS Disconnected/ Low: KVO Running/ No Battery/ Battery Error/ No External Power Supply/ Low battery/ Standby Time Expired/ Dock Connection Interrupted/ System time error/ Relay Invalid Soon/ Reminder/ infusion near complete
Reminder setting	Non-operation state:Default 2min. 1 min, 2min, 3min, 4min, 5min, and off selectable.
Sound volume	0-10 levels selectable, default is level 2 0-30 minutes selectable
Connectivity	
Communication	Wired/Wireless
USB	Support drug library import, patient data import/export, history record export, calibration data import/export
Multifunctional adapter	RS232, nurse call connector, DC adapter

Integration Connect with Drop sensor module
 Connect with BioFusion infusion central station
 Connect with P series patient monitor
 Connect with UM series urine monitor

Battery

Type Lithium Battery, 11.1VDC, 3100mAh

Operating time ≥ 8 hours at 25ml/h
 ≥ 3 hours at 2350ml/h

Shutdown delay At least 30min at a rate of 25ml/h after the first
 low battery alarm

Power Supply Voltage 100-240 V~, frequency 50/60Hz,
 current 0.43-0.22A

Work Environment

Temperature 5-40°C for operating, -20-60 °C for storage

Relative humidity 15-95% for operating, 10-95% for storage

Atmosphere pressure 57.0-107.4 kPa for operating, 16.0-107.4
 kPa for storage

Classification Class I, Type CF

Stackability Supported with Infusion Supervision System
 and Handle.
 Maximum of 12 pumps can be stacked with
 a Infusion Supervision System
 Maximum of 3 pumps can be stacked with a
 handle

*Specifications subject to change without prior notice.

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