

BioFusion S500 Series

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



Physical Specifications(S500/S500 Neo/S500 Ex/S500 Pro)

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

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

Parameters Specifications

Accuracy	Infusion rate error ≤±5% Bolus volume error ≤±5%, or ±0.02ml (whichever is the greater) KVO error ≤±5% Drip rate error ≤±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 ^{±10} mmHg Other levels:≤±145mmHg or ±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)	≤0.5ml
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

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
Patient history data	S500 More than 5000 events S500 Neo More than 6000 events S500 Ex More than 8000 events S500 Pro More than 10000 events

Drug management (option)

Drug library	Supports a customizable drug library of up to 5000 drug profiles, 30 categories, 20 types color-coding drug names. (No default drug list is preloaded)
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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.
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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 & G series patient monitor Connect with UM series urine monitor	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
Working Mode	Rate mode, Time mode, Micro mode, Weight mode, Sequence mode, Loading dose mode, Intermittent mode, Ramp mode, Dose time mode, Drip mode		
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~, 15VDC, frequency 50/60Hz, current 0.43-0.22A		

*Specifications subject to change without prior notice.

Add: No.2 Innovation First Road, Technical Innovation Coast, Hi-tech Zone, Zhuhai, P.R.China
Tel: +86-756-3399935 3399999 Fax: +86-756-3399911
Email: overseas@blt.com.cn Post code: 519085
<https://global.blt.com.cn>

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