

SP-30

Syringe Pump



Features

1. Open system: Accepts all standard syringes of 5ml, 10ml, 20ml/30ml, 50ml/60ml.
2. Large COLOR LED display
3. KVO/Bolus function.
4. Vertical & Horizontal mounting.
5. Anti-bolus system to reduce significantly after occlusion sudden release.
6. Three levels of Occlusion Pressure Alarm.
7. Three work modes: Rate Mode, Time Mode, Dose Mode
8. Identify the specifications of syringe automatically.
9. Audible and visual alarm: Syringe Holder Loose, Syringe Plunger Disengagement, Syringe Flange Insertion Error, Syringe Not Calibrated, Occlusion, Syringe Empty, Rate Abnormal, Battery Empty, No Battery, Key Holding During Infusion, Key Holding During Pause, Infusion Complete, Syringe Near Empty, No Action, Battery Low, Out of Flow Range
10. Stackable: Users can freely stack one syringe pump onto another to provide multiple Solutions
11. Power lost memory.
12. Visual and audible alarm system and accurate injection rate make the process safer and reliable.
13. Change the flow rate without stop during infusion.
14. 8-10 Hours Internal Li-Battery continuous operation.
15. Accurate and sensitive pressure sensor detects occlusion pressure accurately.
16. Excellent injection operation. The accuracy will be ensured even at small-volume injection.

Technical Specifications

PARAMETER	SPECIFICATION
Applicable syringes	5ml, 10ml, 20ml, 30ml, 50ml, 60ml of any standard
Accuracy	+/- 2% with correct calibration

Rate mode	50ml(60ml): 0.1ml/h-2000.0ml/h (0.1ml/h or 1ml/h step) 30ml: 0.1ml/h-1200.0ml/h (0.1ml/h or 1ml/h step) 20ml: 0.1ml/h-800.0ml/h (0.1ml/h or 1ml/h step) 10ml: 0.1ml/h-400.0ml/h (0.1ml/h or 1ml/h step) 5ml: 0.1~200ml/h (0.1ml/h or 1ml/h step)
Time Mode	SOL. VOL: 0.1-9999.9ml (0.1ml step) TIME: 00:01-99:59min (1min step)
Dose Mode	Volume: 0.1-999.9ml (0.1ml step) DRUG MASS: 0.1-999.9mg 0.1mg step) DOSE: 0.001-9999ug/kg/min (0.001ug/kg/min step) WEIGHT: 0.1-300kg (0.1kg the least step) Dose unit: ng/kg/min, ug/kg/min, mg/kg/min, g/kg/min, ug/kg/h, mg/kg/h, g/kg/h, ug/min, mg/min, g/min, ug/h, mg/h, g/h, U/min, U/h, IU/h, U/kg/h, ml/h
Total Volume Range	0.1-9999ml (0.1 ml step)
Purge Rate	50ml(60ml): 1500.0ml/h, 30ml: 1200.0ml/h, 20ml: 800.0ml/h 10ml: 400.0ml/h, 5ml: 200ml/h
KVO Rate	3ml/h when the delivery rate $\geq$ 3ml/h, otherwise KVO is the actual delivery rate
DPS dynamic pressure	Three levels setting Low (60 ± 15 kPa), Medium (90 ± 15 kPa), High (120 ± 15 kPa)
Alarms	Syringe Holder Loose, Syringe Plunger Disengagement, Syringe Flange Insertion Error, Syringe Not Calibrated, Occlusion, Syringe Empty, Rate Abnormal, Battery Empty, No Battery, Infusion Complete, Syringe Near Empty, No Action, Battery Low Three levels of alarm volume LOW, MEDIUM or HIGH
Bolus Rate	5ml: 0.1~200ml/h, 10ml:0.1-400ml/h, 20ml:0.1-800ml/h, 30ml:0.1-1200ml/h, 50ml(60ml):0.1-2000ml/h Programmable and adjustable
Bolus Volume	Range: 1.0~50.0ml, (0.1ml step)
Interface	RS-232
Power source	AC power supply: AC 100 to 240V[$\pm 10\%$], 50/60Hz; DC Power supply: 12~15V, power>15W; Built-in Lithium Battery: Rechargeable, 7.2V, 2600mAh. 8-10hours of continuous operation
Accessories:	AC power line, Operational manual
Protection Class	Class I, Type CF, IP34
Dimension / N.W	240mm*150mm*117mm, 2.0kg
Packing size/G.W	300mm*260mm*160mm, 3.0KG