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**INFUSION LINE**



# ESP-500 Series

Multi-channel Syringe Pumps with drug library



- The ESP-500 series is designed for neonatal, pediatric and patients in the OR, ICU, CCU and Neurology



ESP-500/2A

ESP-500/4B

ESP-500/6C

ESP-500/8D

- Designed for multiple drug injection application (up to 8 pumps)
- Only one power cord for multi-channel pumps
- Innovative Link Mode offers continuous injection to improve safety for patients
- Drug library with all the most used drugs
- History record review and last configuration memory
- Anti-bolus system to reduce significantly bolus after occlusion release
- Change the flow rate while operating
- Manual bolus and automatic bolus
- Wireless data transmission with infusion supervision system and bedside workstation
- Stackable as the maximum 8 channels

## Technical Specifications

	ESP-500/2A	ESP-500/4B	ESP-500/6C	ESP-500/8D
<b>Syringe Pump</b>	2-channels Syringe Pump	4-channels Syringe Pump	6-channels Syringe Pump	8-channels Syringe Pump
<b>Syringe Type</b>	5, 10, 20, 30, 50 ml			
<b>Operating Mode</b>	1) Flow rate mode, rate range: 0.1 – 1500.0 ml/h, max rate value depends on different syringes 2) Time mode, time range: 1-2000min, Preset Volume: 0.1-999.9ml 3) Body weight mode, weight range: 0.1 – 300.0kg, drug limit: 0.1-999.9mg, drug unit: mg/g, dose limit: 0.1 – 1500.0, dose unit: ug/kg/min or mg/kg/h, preset volume range: 0.1 – 999.9ml 4) Link mode			
<b>Flow Rate Range</b>	5 ml syringe: 0.1 ml/h – 100 ml/h 10 ml syringe: 0.1 ml/h – 200 ml/h 20 ml syringe: 0.1 ml/h – 400 ml/h 30 ml syringe: 0.1 ml/h – 600 ml/h 50 ml syringe: 0.1 ml/h – 1500 ml/h			
<b>Increment</b>	0.1ml/h			
<b>Accumulated Injection Volume</b>	0.1 - 999.9 ml			
<b>KVO Rate</b>	0.1-5.0ml/h adjustable			
<b>Drug library</b>	40 drugs, drug units: ug/kg/min and mg/kg/h			
<b>History record</b>	1500 records (Operation status, Infusion Information, Alarms)			
<b>Bolus Rate</b>	5 ml syringe: 100 ml/h; 10 ml syringe: 200 ml/h; 20 ml syringe: 400 ml/h; 30 ml syringe: 400 – 600 ml/h adjustable; 50 ml syringe: 600 – 1500 ml/h adjustable			
<b>Accuracy</b>	± 3%			

### Drug Library:

No.	Drug
1	Aminophylline
2	Amiodarone
3	Atropine
4	Dexmedetomidine Hydrochloride Injection
5	DiaZepatn
6	Diazoxide
7	Digoxin
8	Diltiazem
9	Dobutamine Hydrochloride
10	Dopamine Hydrochloride
11	Epinephrine
12	Esmolol
13	Fentanyl
14	Flumazenil
15	Furosemide
16	Heparin Sodium
17	Insulin
18	Isoprenaline Hydrochloride
19	Isosorbide dinitrate
20	Lidocaine Hydrochloride

No.	Drug
21	Magnesium sulfate
22	Mannitol
23	Metaraminol Bitartrate
24	Metoprolol Tartrate Tablets
25	Midazolam
26	Morphine
27	Nicardipine
28	Nimodipine
29	Nitroglycerin
30	Noradrenaline Bitartrate
31	Pancuronium
32	Phentolamine
33	potassium chloride
34	Propafenone Hydrochloride
35	Propofol
36	Remifentani
37	Sodium Nitroprusside
38	Suxamethonium
39	Urapidil
40	vasopressin



**Display:**

<b>Screen</b>	Independent 3.2 inch color TFT screen for each pump channel
<b>Information</b>	Operation Mode, Flow Rate, Accumulated Injection Volume, Syringe Size, Battery Capacity, Bed No., AC power indicator, Battery charge indicator, Check the Syringe, etc.
<b>Status Indicator</b>	Stop, Run, Bolus, KVO

**Alarm Type:**

Finish, Near, Syringe Empty, Syringe Disengaged, Occlusion, System Error, Battery Empty, Low Battery, Reminder to Operate, No AC Power, Memory Error, Motor Error  
 Occlusion Alarm Pressure Range: 3 levels: 60kPa, 100kPa, 140kPa (±20kPa), Level Low as default

**Battery:**

<b>Type</b>	Lithium polymer battery
<b>Life</b>	Up to 2 hours continuous operation@5 ml/h flow rate

**Environment:**

<b>Temperature</b>	5 - 40 C for operating; -40 - 50 C for storage
<b>Air Pressure</b>	86 - 106 kPa for operating; 50 - 106 kPa for storage
<b>Humidity</b>	20 % - 80 % for operating; 10 % - 95 % for storage

**Others:**

	<b>ESP-500/2A</b>	<b>ESP-500/4B</b>	<b>ESP-500/6C</b>	<b>ESP-500/8D</b>
<b>Dimension</b>	320 (L) × 110mm(D) × 200mm(H)	320mm(L) × 110mm(D) × 400mm(H)	320mm(L) × 110mm(D) × 600mm(H)	320mm(L) × 110mm(D) × 800mm(H)
<b>Weight</b>	3.4kg	7.0 kg	10.4 kg	14 kg
<b>Classification</b>	Class II, Type BF			
<b>Power Supply</b>	100 - 240 VAC, 50/60 Hz			
<b>Waterproof level</b>	IPX3			



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