



ESB-2102

SYRINGE PUMP



APPLICATIONS

1. Continuous Micro-infusion in ICU and CCU.
2. Maintenance therapy micro-infusion and blood transfusion in premature infants and neonates.
3. Injections of hormones.
4. Continuous injection of anesthetics.
5. Injection of oxytocics.
6. Injection of anticoagulants during dialysis and extracorporeal blood circulation.
7. For anti cancer drugs.

FEATURES

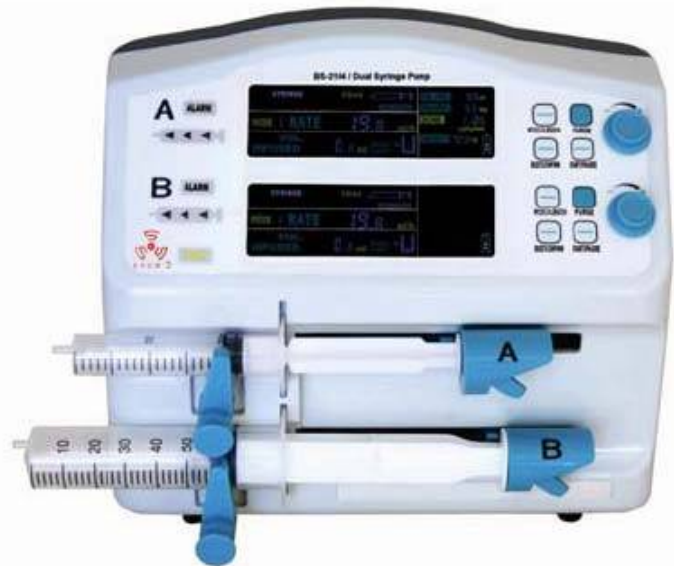
Can be used with any standard of syringe	Identify the specifications of syringe automatically
Three work modes	Can be set at any of three levels of limit pressure
Can be set at any of three levels of alarm volume	Audible and flashing alarms
Purge	RS232 interface
Clue for mistake operations	AC power and battery
KVO	Unique colour LCD

SPECIFICATIONS

APPLICABLE SYRINGE	Any standard of syringe with 10ml, 20ml (30ml) and 50ml (60ml)	
ACCURACY	± 2% (after correct calibration)	
DELIVERY RATE RANGE	50ml (60ml):	0.1ml/h~1800.0ml/h (0.1ml/h step)
	20ml (30ml):	0.1ml/h~800.0ml/h (0.1ml/h step)
	10ml:	0.1ml/h~400.0ml/h (0.1ml/h step)
TIME MODE	SOL. VOL.: 0.1~999.9ml (0.1ml step)	
	TIME: 1~1999min (1min step)	
BODY WEIGHT MODE	SOL. VOL.: 0.1~999.9ml (0.1ml step)	
	DRUG MASS: 0.1~999.9mg (0.1mg step)	
	DOSE: 0.01~99.99ug/kg/min (0.01ug/kg/min step) 0.01~99.99mg/kg/h (0.01mg/kg/h step)	
	WEIGHT: 0.1~300kg(0.1kg the least step)	
ALARMS	Near empty, Syringe empty, Volume complete (a volume limit has been set), Occlusion, Syringe loose, Operation error, Low battery and other device failures.	
VOLUME LIMIT RANGE	0~1999.9ml (0.1ml step)	
TOTAL VOLUME RANGE	0.1~1999.9ml (0.1ml step)	
PERGE RATE	50ml (60ml): 1800.0ml/h	20ml (30ml): 800.0ml/h 10ml: 400.0ml/h
KVO RATE	1ml/h	
POWER SOURCE	Ac power supply:AC 100 to 240V ±10%,50/60Hz; Internal Li Battery: 11.5V, 2000mAh. Battery life with continuous operation is approx. 8 hours (when using a new, full charges battery and running at 5ml/h with any standard of syringe)	
POWER CONSUMPTION	≤25VA	
SHOCK PROTECTION	Class 1, Type BF	
DIMENSION	280mm*160mm*130mm	
NET WEIGHT	Approx. 3.5kg	
OPERATING CONDITIONS	Ambient temperature: -10~40° C	Relative humidity:20~90%
STORAGE CONDITIONS	Ambient temperature: -10~55° C	Relative humidity:10~90%
ACCESSORIES	AC power line, Operation manual	

ESB-2104

DOUBLE SYRINGE PUMP



APPLICATIONS

1. Continuous Micro-infusion in ICU and CCU.
2. Maintenance therapy micro-infusion and blood transfusion in premature infants and neonates.
3. Injections of hormones.
4. Continuous injection of anesthetics.
5. Injection of oxytocics.
6. Injection of anticoagulants during dialysis and extracorporeal blood circulation.
7. For anti cancer drugs.

FEATURES

2 Syringe Drive Systems	Delivery drugs independently and cooperatively for one or two patient without any influence on each other.
2 Operation Mode	1. Flow rate controlled infusion mode (with avoidpuois mode) 2. Volume and Time Controlled Inf
7 Flow Rate Units for options	ml/h, mg/h, ug/h, mg/kg/h, mg/kg/min, ug/kg/h, ug/kg/min. ----Free from artificial conversion.
Bolus Infusion	300 ml/h
Wide Range Flow Rate	0.1~600 ml/h (20ml syringe); 0.1~1200ml/h (50 or 60 ml syringe).
Special Excessive Pressure Alarm	According the need of clinic, adjust the pressure alarm to improve the safety of infusion.
Intelligent LCD Display	A graphic display shows the trajectory of the estimated plasma and effect site drug concentration over time.
Data sharing with PC	RS-232 Interface enables the history data to be transmitted from pump to PC.

SPECIFICATIONS

Syringe Available	20 ml Syringe 50(60)ml syringe Automatically Identify the Syringes Volume.
Flow Rate	20 ml syringe : 0.1~600ml/h / 50(60)ml syringe: : 0.1~1200ml/h
Accuracy	±3% (capacity>2.0ml,flow rate >1.0ml/h, after pre-filling)
7 Audible and flashing alarms	1. Syringe disengaged, 2. Empty of syringe, 3. Occlusion, 4. Near empty of syringe, 5. End of infusion, 6. AC Power-failed, 7. Low voltage
Display	40×180 pixel LCD Screen with convenient operation interface.
Operating conditions	Ambient temperature: 5°C~40°C / Relative humidity (RH): ≤80% Power supply: AC 220 V±22V 50 Hz ±1Hz; DC Battery: 12V battery can use for 3 hours after charged for more than 10 hours. Atmospheric pressure: 860~1060hPa
Dimension & Weight	Dimension (mm): 300×200×270 / Weight (kg): 3.5
Safety Classification	Class II & BF (internal battery)



Pulse Healthcare Technology
House: 11/1, Shahid Minar Road
Kallyanpur, Dhaka-1216, Bangladesh.
Mobile: +8801708008061
e-mail: info@pht.com.bd
web: www.pht.com.bd



ESSE 3 Via Garibaldi 30
14022Castelnuovo D.B. (AT)
tel +39 011 99 27 706
fax +39 011 99 27 506
e-mail esse3@chierinet.it
web : www.esse3-medical.com

