Specifications: M260

Syringe Pump

M260

Physical Characteristics

Dimensions:	<312mm×128mm×133mm (L*W*H)
Weight	≤1.6kg (Including battery)
Screen Size:	3" Segmented LCD Display, 240×128 pixels
Classification:	Type CF, Defibrillation-proof, Class I, EN1789 Certified

Operating Conditions

Temperature:	5~40°C
Humidity:	15%~95% (non-condensing)
Pressure:	57.0~106.0kPa

Storage Conditions

Temperature:	-20~+55°C
Humidity:	10%~95% (non-condensing)
Pressure:	57.0~106.0kPa

Power

Power requirement:	100-240V~, 50/60Hz±1Hz
Applied Input Power:	0.5A~0.3A
Battery Type:	Rechargeable Lithium-ion battery
Battery Capacity:	Standard 7.2V — 2550mAh Optional 7.2V — 5100mAh
Battery Charging Time:	2550mAh: Not more than 4 hours to full charge when powered off 5100mAh: Not more than 7.5 hours to full charge when powered off
Battery performance:	2550mAh: Up to 6 hours of continuous working (at 5ml/h) 5100mAh: Up to 12 hours of continuous working (at 5ml/h)

Functional

Working modes:	Rate Mode, Time Mode, Weight Mode, Sequential mode, First dose mode, Ramp mode, Micro mode, Intermittent Mode, Dose Time Mode

Indicators

Hardware Indicators:	Battery status indicator AC Power indicator Alarm Light bar indicator Power Button backlight
On-Screen Indicators:	Infusion related information: Selected drug, Mode, Left Vol, Volume, Rest Time, Infusion Rate, Alarm status, Battery status, Syringe brand and size, Running (Infusion Status) Bar, WIFI Icon Dynamic Pressure System (DPS)

Interface

	AC power interface
	Multifunction Port (RS232, DC Power, Nurse Call)

Dynamic Pressure System (DPS)

Display:	DPS indicator displayed as visual pressure value for occlusion alarm.
Selectable Levels:	4 Selectable Levels: 150, 300, 525, 900 Unit: mmHg

Ergonomics

Mounting Solutions:	Allows for mounting through a pole clamp for either stationary use on a bed rail or portability through the use of a trolley (TC800).
Portability:	Comes with a Carrying Handle.

Working Modes:

Standard Modes:

Rate Mode, Time Mode, Weight Mode

Optional Modes:

Micro Mode, Sequential Mode, First Dose Mode, Ramp Mode, Dose Time Mode, Intermittent Mode

Rate Mode setting ranges:

Parameters:	Rate, Time and Volume to Be Infused (VTBI) can be set to automatically calculate the remaining parameter.
Rate range:	0.10~2000.00ml/h;
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Time range:	00:00:01~99:59:59 (h:m:s); Step: 1s

Time Mode setting ranges:

Parameters:	Rate, Time and Volume To Be Infused (VTBI) can be set to automatically calculate the remaining parameter.
Rate range:	0.10~2000.00ml/h;
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Time range:	00:00:01~99:59:59 (h:m:s); Step: 1s

Weight Mode setting ranges:

Parameters:	Drug Weight, Drug Volume, Patient Weight, Dose Rate and Volume to Be Infused (VTBI) can be set to automatically calculate the infusion rate.
Rate range:	0.10~2000.00ml/h;
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Time range:	00:00:01~99:59:59 (h:m:s); Step:1s

Sequential Mode setting ranges:

Parameters:	Time, Rate and Volume to be infused (VTBI) can be set for each sequence to automatically calculate the remaining parameter and display a total VTBI.
Sequences:	Up to 10 sequences per pump.
Rate range:	0.10~2000.00ml/h;
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml. The total sum of VTBI for all sequences cannot exceed 9999ml.
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Time range:	00:00:01~99:59:59(h: m: s); Step: 1s

First Dose mode setting range:

Parameters:	Main time, Main rate, Main volume, First time, First rate and First volume can be set.
Rate range:	0.10~2000.00ml/h;
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Time range:	00:00:01~99:59:59 (h:m:s); Step: 1s

Micro Mode setting range:

Parameters:	Rate, Time and Volume to Be Infused (VTBI) can be set to automatically calculate the remaining parameter.
Rate range:	0.10~100.00ml/h;
Rate steps:	0.01 ml/h
VTBI range:	0.10~1000.00ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml
Time range:	00:00:01~99:59:59 (h:m:s); Step: 1s

Ramp mode setting range:

Parameters:	Total Time, Up Time, Down Time and Volume to be infused (VTBI) can be set to automatically calculate the Steady Rate. The rate range below refers to the values in which the automatically calculated steady rate may not exceed.
Rate range:	0.10~2000.00ml/h;
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Time (Total time, Up time, Down time) range:	00:00:01~99:59:59(h: m: s); Step: 1s If the up time and down time are not input, it defaults to 0s.

Intermittent Mode setting range:

Parameters:	Intmt.Vol (Intermittent Volume), Intmt. Rate (Intermittent Rate), Keep Rate, Interval and Volume to Be Infused (VTBI) can be set.
Intmt. Rate range:	0.10ml/h~2000.00ml/h
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Keep Rate range:	0.10~5.00ml/h; Step: 0.01ml/h
Time range:	00:00:01~99:59:59 (h:m:s); Step: 1s

Dose Time Mode setting range:

Parameters:	Drug Volume, Drug Weight, Dose Rate, Time and Volume to be infused (VTBI) can be set to automatically calculate the Infusion rate. The rates below refer to the values in which the automatically calculated Infusion rate may not exceed.
Dose Rate range:	When the unit of VTBI is other than ml, the rate is dose rate, and the range is 0.10~999 (editable). when the unit of VTBI is ml, the rate unit is ml/h, with a range of 0.10~2000.00ml/h.
Rate steps:	At 0.10 ml/h~99.9ml/h, step: 0.01 ml/h At 100.0 ml/h~999.9ml/h, step: 0.1 ml/h At 1000 ml/h~2000 ml/h, step: 1 ml/h
VTBI range:	0.10~9999ml
VTBI steps:	At 0.10 ml~99.9ml, step: 0.01 ml At 100.0 ml~999.9ml, step: 0.1 ml At 1000 ml~9999 ml, step: 1 ml
Time range:	00:00:01~99:59:59(h: m: s); Step: 1s

Bolus and Purging ranges:

Rate range:	0.10~2000.00ml/h; Step: 0.01ml/h
Volume range:	0.10~99.99ml

Infusion Accuracy:

Infusion accuracy:	≤±2% for rates >1.00ml/h (For specified and calibrated syringes, accuracy of infusion: ≤±1.8%)
Bolus accuracy:	≤±5% or ≤±0.05ml, whichever value is larger

Drug Library and Information Management:

Drug Library:	Up to 3000 drug types can be registered.
Patient Information Management:	A patient information management system is inbuilt that allows for patient information input and recording.
Patient Type:	Adult, Neonatal, Paediatric selectable
Other information:	Name, Patient ID, Bed No., DOB, Height, Weight, Age, Sex, Blood type, BSA, BMI, Doctor in Charge, Prescription

Alarms:

Compliance:	IEC60601-1-8
Alarm levels:	P1 to P4
Alarm volume:	Max: 65db (At 1m distance) Min: 45db (At 1m distance)

Occlusion Alarm:

Range:	150~900mmHg (P1-P4)
Accuracy:	±20% or ±125mmHg, whichever is greater
Unit settings:	mmHg, kPa, bar, psi
EBIS:	3 Levels Selectable Empty Bottle Inspection Sensitivity (EBIS)

Features

Syringe selection:	Brands selectable upon Infusion Set installation: JieRui, BD Supports up to 3 user-defined custom Syringe Brands.
Syringe Parameters:	5ml, 10ml, 20ml, 30ml, 50/60ml
Accumulated Volume Range:	0.10~9999ml
Drug Weight (Dose) Range:	0.100~99999 (g/mg/ug/ng/IU/U/KU) Steps of 0.001
Dose Rate Range:	0.1~9999 (ng/kg/h, ug/kg/h, mg/kg/h, IU/kg/h, IU/kg/min, ug/kg/min, mg/kg/min, ng/kg/min, g/kg/h, g/kg/min, KU/kg/min, KU/kg/h, U/kg/min, U/kg/h)
Ingress Protection:	IP44

KVO Rate range (Keep Vein Open):	0.10~5.00ml/h; (KVO will last for 30 minutes, then an alarm will sound) Step: 0.01ml/h	Nurse Call:	Supported
		No operation time settings:	1~5min (step: 1min)
Event Logs：	Up to 2000 records FIFO. Records any system changes, alarms and actions taken. Supports record log export.	Continuous Titration:	Allows editing of infusion rate for ongoing infusions without the need to stop any currently ongoing infusions.
Night mode:	Automatic adjustment of volume and screen brightness	Others:	Automatic Pressure Release (Anti-bolus), Syringe Calibration function, WIFI
Purging:	Manual and automatic selectable		
Software Update:	Via RS232 port		