

# **Meditec Infusion Pumps**

Syringe & Volumetric Infusion Pumps





Meditec England IP200 is a microprocessor controlled high-precision, intelligent drip type infusion pump, which is capable of accurately controlling the delivery rate of disposable IV set and monitoring the infusion course.

It is specially suitable for clinical treatments which require continuous and precisely controlled infusion at a constant rate. It is widely used in internal medicine, surgical, paediatrics, obstetrics, ICU, CCU wards, operating rooms and other clinical infusion treatments.

# **Convenient Operation**

Flexible stack meets demands of different bedside infusion. It is convenient for transportation of patients when it installs on the elaborate handle.

#### Modular Design

Suitable for mounting both syringe pumps as well as volumetric infusion pumps simultaneously in quantity 3 or more (in multiples of 3).

Syringe and infusion pumps apply the same operation panel and every pump is an independent infusion module, all these are for the convenience of operation and user training.

## High Strength Shell

The shell is made from PBT plastic and it has well characteristics of resistance to corrosion. The corrosion risk of medicine leakage could be avoided.

#### Accurate

Sophisticated stepper motor and driving system apply 256 sub-drive programs, and the motor accuracy is as high as 36.6 nano per step and the stepping value rate is 0.01 ml/h, it can totally meet clinic demands of toxic and anaesthetic infusion or the high accuracy neonatal infusion.

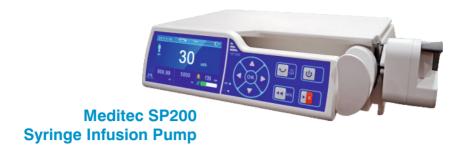


Meditec IC20 Infusion Workstation Docking Station (Optional)



Event Log: Can store up to 2000 events like Alarm Logs, Infusion Log and Operation logs.

Drug Storage: Can store up to 100 drugs under specific drug category e.g. Anaesthesia Common Gas, Hypertension Drug, ICU Common drug etc.



Meditec England SP200 syringe pump has been designed to combine high level of safety and performance with simple & reliable operation. SP200 offers comprehensive range of features making it ideal for general, critical care & neonatal infusion where accuracy is important.

SP200 syringe pump has fast start functions, which can eliminate error caused by starting delay.

Dual CPU design assures the safety of system.

# Easy to Operate

SP200 applies 3.5 inch color touch screen and mobile style UI design and it is easy to operate. Abundant infusion modes meet various clinic demands without complicated conversion and operation. The daytime mode and night mode could be switched automatically, and it is not necessary to set one by one and so the noise pollution would be decreased effectively.



Meditec IC20 Infusion Workstation with Control Panel - Docking Station (Optional)

#### Intelligent

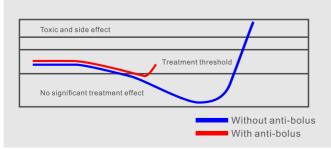
It has wi-fi and network interface, which can work with DOCK as a bedside infusion workstation (docking station). All data can be monitored in real-time, and data acquisition and transmission can be done automatically, all above brings you to an intelligent infusion management generation.

#### **Control Panel**

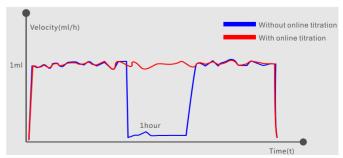
Central Station control panel has facility to connect up to 16 beds i.e. syringe pumps or volumetric pumps at a time.

## Online Titration and Anti-bolus Functions

Both IP200 & SP200 have online titration and anti-bolus functions, which can avoid the adverse reaction caused by blood concentration.



Comparison chart of anti-bolus



Velocity can be modified in working status

# **Technical Specifications**

# IP200 SP200

| IP200                            |  | SP200  |                                 |
|----------------------------------|--|--|---------------------------------|
| Screen                           | 3.5 inches TFT monochrome/Color (Optional) touch screen, resolution:128*64 / 480*272 (Optional), with 5/9 (Optional) adjustable brightness levels  | Screen   | 3.5 ir<br>resolus<br>adjus      |
| Keypad                           | 9 Function keys with navigation  | Keypad   | 9 Fur                           |
| Stack-able                       | Yes (Multiples of 3) Docking Station for power only (Meditec IC20) - Optional  | Stack-able   | Yes (I<br>Dock<br>Dock          |
|                                  | Docking Station for Central Monitoring (Meditec IC20) - Optional   | Syringe Modes  | Optio<br>Rate                   |
| Operating Modes                  | Rate Mode, Time Mode, Dose Rate Mode Optional- Loading Dose, Trapezia, Sequence and Interrupt Mode   |  | Optic<br>Interr<br>Othe         |
| IV Set                           | 4 Preset IV brands, 6 new brands can be added, brand name editable   | Syringes   | Auto<br>syring                  |
| Flow Rate Deviation              | $\leq$ ± 5% (± .0.5% on mechanism deviation)   | Syringe Management   | 4 Pre                           |
| Flow Rate Range                  | 0.10-1500 ml/h / 0.10-2000ml/h (Optional)  | Flow Rate Deviation  | 11a111€                         |
| Flow Rate Increment              | 0.01ml/h for 0.10ml/h–99.99ml/h<br>0.1ml/h for 100.0ml/h–999.9ml/h<br>1ml/h for 1000ml/h–1500ml/h or<br>1000ml/h–2000ml/h(Optional)  | Flow Rate Range  | 5/6m<br>10ml<br>20ml<br>30ml    |
| VTBI Range                       | 0.10-9999.99 ml  |  | 50/60                           |
| VTBI Increment                   | 0.01ml for 0.10 ml/h–99.99ml/h<br>0.1ml for 100.0ml/h–999.9ml/h<br>1ml for 1000ml/h–9999ml/h   | Flow Rate Increment  | 0.01r<br>0.1m<br>1ml/h          |
| VTBI Time Range                  | 0:00:01–99:59:59 (hh:mm:ss)  | VTBI Range   | 0.10-                           |
| Bolus                            | Manual (Std.) & Automatic (Optional)   | VTBI Increment   | 0.01r                           |
| Bolus rate                       | 0.10–1500ml/h / 0.10–2000ml/h (Optional)   |  | 0.1m<br>1ml f                   |
| Auto Bolus VTBI                  | 0.1–5ml, at 0.1ml increment  | VTBI Time Range  | 0:00:                           |
| KVO Rate                         | 0.1–5ml, at 0.1ml increment  | Bolus  | Manu                            |
| Occlusion Pressure               | 5 adjustable setting, 5 $\sim$ 145KPa / 11 adjustable setting, 10–135 Kpa (Optional)   | Bolus rate   | 5/6m<br>10ml<br>20ml            |
| Dynamic Pressure<br>Surveillance | DPS, yes   |  | 30ml<br>50/60                   |
| Bubble Detection                 | 2 adjustable leves single bubble size 30ul, 100ul, 300ul   | Auto Bolus VTBI  | 0.1–5                           |
| Audio and Visual Alarms          | AC Power Interruption, DC Power Interruption, Low<br>Battery, Depleted Battery, Forget Reminder, Infusion Near<br>End, Infusion Complete, Door Open, Flow Rate, Syringe<br>Unlocked, System Exception, Upstream Occlusion,<br>Bubble detection Alarm | KVO Rate Occlusion Pressure  Dynamic Pressure Surveillance | 0.1-5<br>5 adj<br>11 ad<br>DPS, |
| Drug Library                     | Up to 100 from specified drug category<br>Optional - Programmable with DERS (Drug Error Revise<br>System)  | Auto calibration Audio & Visual Alarms                     | Yes<br>AC P<br>Deple            |
| Event Log                        | 2000 logs  |  | Infusi                          |
| Parameters Adjustable            | YES (during infusion)  | Drug Library   | Unloa<br>Up to                  |
| Anti-Bolus Function              | YES, less than 0.05ml  | Brag Elorary   | Optic                           |
| Anti-Free flow                   | Yes  |  | Syste                           |
| Key Lock                         | Yes  | Event Log  | 2000                            |
| Night Mode                       | Programmable and auto shift (Optional)   | Parameters Adjustable Anti-Bolus Function                  | YES,                            |
| Alarm                            | 3 alarm grades, 5/9 (Optional) adjustable sound volume settings  | Key Lock Night Mode  | Yes<br>Progi                    |
| Data Port                        | P1 connector (Optional)  | Alarm  | 3 ala                           |
| Dual CPUs                        | Yes  |  | settin                          |
| Waterproof                       | IPX3   | Data Port  | P1 cc                           |
| Classification                   | Class I, CF  | Dual CPUs Waterproof                                       | Yes<br>IPX3                     |
| Power                            | AC: 100V - 240V, 50Hz/60Hz, 35VA   | Classification   | Class                           |
| Battery                          | Rechargeable lithium-ion battery 10-15V/2.5A Battery Life: ≥8 hours at 25ml/h  | Power<br>Battery   | AC: 1                           |
| Charging Time                    | ≤4 hours   |  | Batte                           |
| Dimensions & Net Wt.             | 240mm x 175mm x 80mm; 1.8kg  | Charging Time  | ≤4 h                            |
| Packing & Gross Wt.              | 414mm x 238mm x 154mm; 2.8kg   | Dimensions & Net Wt. Packing & Gross Wt.                   | 280m<br>414m                    |

| 01 200                |   |
|-----------------------|---|
| Screen                | 3.5 inches TFT monochrome/Color (Optional) touch screen,    |
|                       | resolution:128*64 / 480*272 (Optional), with 5/9 (Optional) |
|                       | adjustable brightness levels                                |
|                       |   |
| Keypad                | 9 Function keys with navigation                             |
| Stack-able            | Yes (Multiples of 3)  |
|                       | Docking Station for power only (Meditec IC20) - Optional    |
|                       | Docking Station for Central Monitoring (Meditec IC20) -     |
|                       | Optional  |
| Syringe Modes         | Rate Mode, Volume-Time, Dose Rate                           |
| Syllinge Modes        |   |
|                       | Optional- Loading Dose, Trapezia, Sequence and              |
|                       | Intermittent Mode   |
|                       | Others - Relay Mode (Optional)                              |
| Syringes              | Auto size detection of 5/6ml, 10ml, 20ml, 30ml, 50/60ml     |
|                       | syringes  |
| Syringe Management    | 4 Preset IV brands, 6 new brands can be added, brand        |
| Symige Management     | name editable (Optional)                                    |
| EL D. D               |   |
| Flow Rate Deviation   | $\leq$ ± 2% ( ± .0.5% on mechanism deviation)               |
| Flow Rate Range       | 5/6ml syringe: 0.10–150.0ml/h                               |
|                       | 10ml syringe: 0.10–300.0ml/h                                |
|                       | 20ml syringe: 0.10–600.0ml/h                                |
|                       | 30ml syringe: 0.10–800.0ml/h                                |
|                       | 50/60ml syringe: 0.10–1500.0ml/h                            |
| Flow Data because of  |   |
| Flow Rate Increment   | 0.01ml/h for 0.10ml/h–99.99ml/h                             |
|                       | 0.1ml/h for 100.0ml/h–999.9ml/h                             |
|                       | 1ml/h for 1000ml/h-1500ml/h                                 |
| VTBI Range            | 0.10-9999.99ml  |
| VTBI Increment        | 0.01ml for 0.10ml/h–99.99ml/h                               |
| VIBINGICITICIT        | 0.1ml for 100.0ml/h–999.9ml/h                               |
|                       |   |
|                       | 1ml for 1000ml/h-9999ml/h                                   |
| VTBI Time Range       | 0:00:01-99:59:59 (hh:mm:ss)                                 |
| Bolus                 | Manual (Std.) & Automatic (Optional)                        |
| Bolus rate            | 5/6ml syringe: 0.10 – 150.0ml/h                             |
| Dolas Tate            | 10ml syringe: 0.10 – 300.0ml/h                              |
|                       |   |
|                       | 20ml syringe: 0.10 – 600.0ml/h                              |
|                       | 30ml syringe: 0.10 – 800.0ml/h                              |
|                       | 50/60ml syringe: 0.10 – 1500ml/h                            |
| Auto Bolus VTBI       | 0.1–5ml, at 0.1ml increment                                 |
| KVO Rate              | 0.1–5ml, at 0.1ml increment                                 |
| Occlusion Pressure    | 5 adjustable setting, 5 ~ 145kPa /                          |
| Occidsion Flessure    |   |
|                       | 11 adjustable setting, 10~135 kPa (Optional)                |
| Dynamic Pressure      | DPS, yes.   |
| Surveillance          |   |
| Auto calibration      | Yes   |
|                       |   |
| Audio & Visual Alarms | AC Power Interruption, DC Power Interruption, Low Battery,  |
|                       | Depleted Battery, Forget Reminder, Infusion Near End,       |
|                       | Infusion Complete, Injector Empty, Flow Rate, Syringe       |
|                       | Unlocked, System Exception                                  |
| Drug Library          | Up to 100 from specified drug category                      |
| <u> </u>              | Optional - Programmable with DERS (Drug Error Revise        |
|                       | System)   |
| Event Log             | 2000  |
| Event Log             | 2000 logs   |
| Parameters Adjustable | YES (during infusion)                                       |
| Anti-Bolus Function   | YES, release 70% pressure of the peak value                 |
| Key Lock              | Yes   |
| Night Mode            | Programmable and auto shift (Optional)                      |
|                       | 3 alarm grades, 5/9 (Optional) adjustable sound volume      |
| Alarm                 |   |
|                       | settings  |
| Data Port             | P1 connector (Optional)                                     |
| Dual CPUs             | Yes   |
| Waterproof            | IPX3  |
| Classification        |   |
|                       | Class I, CF   |
| Power                 | AC: 100V-240V, 50Hz/60Hz, 35VA                              |
| Battery               | Rechargeable lithium-ion battery 10-15V/2.5A                |
|                       | Battery Life: ≥8 hours at 5ml/h                             |
| Charging Time         | ≤4 hours  |
|                       | 44.4  |
| Dimensions & Net Wt.  | 280mm x 170mm x 80mm; 1.8kg                                 |
| Packing & Gross Wt.   | 414mm x 238mm x 154mm; 2.8kg                                |
|                       |   |



Manufactured in India by

# **Allied Medical Limited**

76-77, Udyog Vihar, Phase IV, Gurugram - 122 015, Haryana, INDIA

Phone : +91 124 4111444 Mobile : +91 9811184252 Toll Free : 1800 102 7879

E-mail : sales@alliedmed.co.in Website : www.alliedmed.co.in

Design & Technology Partner



# **Meditec International England Limited**

E-mail : sales@meditecengland.co.uk Website : www.meditecengland.co.uk #55000396R0 Ver.20.7