## Friendliness

- "One hand operation" and intuitive keypad
- Compact and lightweight design for easy carrying
- Long runtime battery, suitable for emergency and patient transfer

## Safety

- High accuracy: ±2%, satisfying neonatal use
- Fast start function against start delay due to friction
- Dynamic pressure detection, Anti-bolus
- IP34 water and dust protection, support cleaning with water

## Connectivity

- Ambulance support
- WiFi connection available
- Dock support



# BeneFusion SP1 Ex Syringe pump

# mindray

healthcare within reach

# BeneFusion  SP1 Ex

| Specifications and Functions | |
|---|---|
| Dimension | 330 x 126 x 110mm |
| Syringe size | 5, 10, 20, 30, 50/60 ml |
| Infusion mode | Rate Mode |
| Flow rate range | 5ml syringe: (0.1~150) ml/h; 10ml syringe: (0.1~300) ml/h; 20ml syringe: (0.1~600) ml/h 30ml syringe: (0.1~900) ml/h; 50ml/60ml syringe: (0.1~1500) ml/h |
| Accumulated volume | 0.1~9999 ml, increment is 0.1 ml |
| VTBI | 0.1~9999 ml, increment is 0.1 ml |
| Increment | 0.1~999.9 ml/h, increment is 0.1 ml/h; 1000~1500 ml/h, increment is 1 ml/h |
| Accuracy | Flow rate≥1 ml/h: Accuracy ≤ ±2%; Flow rate    1 ml/h: Accuracy ≤ ±3% |
| KVO rate | 0.5 ml/h, unadjustable |
| Bolus/Purge rate | 0.10-1500ml/h (depending on syringe size) |
| Occlusion | Low 300±75 mmHg (40kPa) Medium 525±75 mmHg (70kPa) High 900±135 mmHg (120 kPa) |
| Screen | 2.5" LCD  monochrome screen, 132 x 32 Pixels |
| Titration | Yes |
| Keypad lock | Yes |
| Pause | Yes |
| Automatic recognition of syringe size | Yes |
| Self-test system | Yes |
| Weight | <1.8kg (including clamp) |
| Dock | Supported |
| Handle | Included |
| Mouting type | Standard: Vertical Pole; Optional: Horizontal Pole |
| Alarm volume | 1-8 levels, selectabled |
| Preset syringe brand | 8, include B-D, B.Braun, Terumo, and 5 Chinese brand; local brand configuration supported |
| Language | 11, Chinese, English, French, Russian, Turkish, Portuguese, Polish, Bulgarian, Czech, Romanian |
| Alarm | |
| | VTBI done, VTBI near done, KVO finish, syringe empty, syringe disengaged, syringe near empty, occlusion, system error, system abnormal, battery low, battery empty, reminder, standby, AC power disconnection |
| Safety Requirement | |
| AC power | 100-240V (50/60Hz) |
| Battery type | Lithium |
| Battery operation time | Standard: 6 hours@5ml/h; Optional: 12 hours@5ml/h |
| Charging time | <5hours |
| Classification | CF, Class I |
| IP Grade | IP 34 |
| Temperature | 0~40ºC for operating, -40~70ºC for storage |
| Humidity | 15~95%  for operating, 10~95% for storage |
| Air pressure | 57~106kPa for operating, 50~106kPa for storage |
| Interface | |
| Data interface | Supported, RS232 |
| Wireless | WiFi (optional) |
| Nurse Call | Supported |
| DC input | Supported |
| Ambulance | Supported, meet EN-1789 requirement |

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