BeneFusion nDS

Infusion Supervision System

Data Sheet

Size

1 controller and 4 slots	≤ 270x 173 x395 mm
1 controller and 2 slots	≤ 270 x 173 x 245 mm
Extension 4 slots	≤ 270 x 173 x 335 mm

Weight

1 controller and 4 slots	≤ 3.9 kg
1 controller and 2 slots	≤ 2.9 kg
Extension 4 slots	≤ 3.0 kg

Display

Screen	3"OLED, ≥ 256x64 pixels
Information	bed number, patient name, battery status, network status, total volume of the 24h infusion of the pump

Power supply

Battery type	Lithium-ion, 2500mAh
Operating time	At least 2 hours
Recharging time	≤ 6 hour
AC power	100-240V~, 50/60Hz, 8-3.4A

Environment

Temperature	5-40℃ for operating, -30-70℃ for storage
Humidity	15-95% for operating, 10-95% for storage
Air pressure	57.0-107.4kPa for operating, 16.0-107.4kPa for storage

Alarms

Type	audible and visual alarm
2 Levels	High: Battery Depleted/ System Error
	Low: Slave Controller Abnormal/ Battery in

Use/ Low Battery/ Battery Error/ LAN IP Address Conflict/WLAN IP Address Conflict/ CMS/eGW Disconnected

Connectivity

HL7 protocol	support connection with CIS/HIS
Communication	wired/wireless
USB	support drug library import, patient information loading, patient data export, history record export, barcode reader connection
Multifunctional connector	RS232; nurse call connector; BeneLink connector
Integration	Synergy with patient monitor
	Connect with BeneFusion nCS infusion central station
	Connect with BeneVision Central Monitoring System (CMS)

Other

Night mode	On/Off, start time, end time and sound volume adjustable
History record	up to 2500
Mounting type	horizontal, vertical
Pole clamp	Horizontal: Diameter range 10 × 25 mm
	Vertical: Diameter range 15-40mm
	One pole clamp per shelf module
Programmable mode	Support automatic multi-channel relay
	Vertical: Diameter range 15-40mm
Maintenance	support 2-24 pumps tool-free assembly
	support batch calibration, drug library import, software upgrade
Classification	Type CF, class I, IP33

mindray

mindray

BeneFusion nSP/nVP/nDS
Infusion System

Smart touch, Safe medication

mindray
healthcare within reach

7" full-size touchscreen
bringing a brand new user experience

See-through window design
easy to clean and observe syringe status

Intuitive UI design
80% operation can be done on the main interface.

Premium material
supports up to 49 disinfectants

Touch the flexibility

Extraordinary touch experience

BeneFusion n Series features a full-size color touchscreen that comes with an intuitive UI to provide an extraordinary interactive experience as never before.

- 7-inch HD capacitive touchscreen makes the interaction as smooth as using smart devices in your daily life.
- The intuitive UI facilitates an easy operation by presenting critical parameters with an elegant layout.

All in one

BeneFusion nSP and nVP are versatile enough to integrate all functions to satisfy a variety of clinical purposes.

Ce/Cp
TCI/TIVA

Nutrition

PCA

Blood transfusion

Neonatal

Flexible docking solution

BeneFusion nDS is flexible enough to provide a comprehensive solution for a variety of infusion scenarios.

- Tool-free modular design enables easier expansion of slots from 2 to 24 pumps
- BeneFusion tDS transfer docking station enables simple and efficient patient transfers

2
Wards

3
Transfer

4-8
Intensive Care
/Operation

10-24
Intensive Care

One-handed plug and play

Smooth and easy slot-in loading of pumps into the docking station.

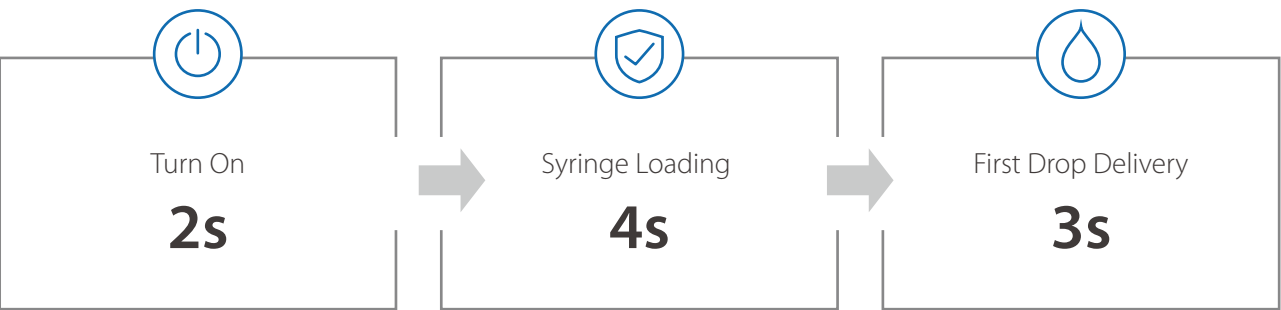## Automatic multi -channel relay

Circular and customized relay together guarantee a stable drug-administering process.

Dedicated to safety

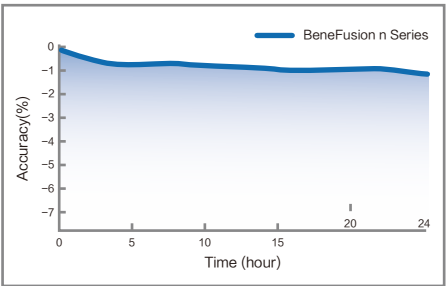## Innovative technologies ensures safe medication

SmartRapid

SmartRapid ensures timely infusion by significantly shortening the start-up time, from turning on the pump to delivering the first drop of medication.

Turn On	Syringe Loading	First Drop Delivery
2s	**4s**	**3s**

Precise and consistent performance

- Rivalled accuracy: **nSP ≤±1.8%; nVP ≤±5%**
- Flow rate initiates as precise as 0.01ml/h
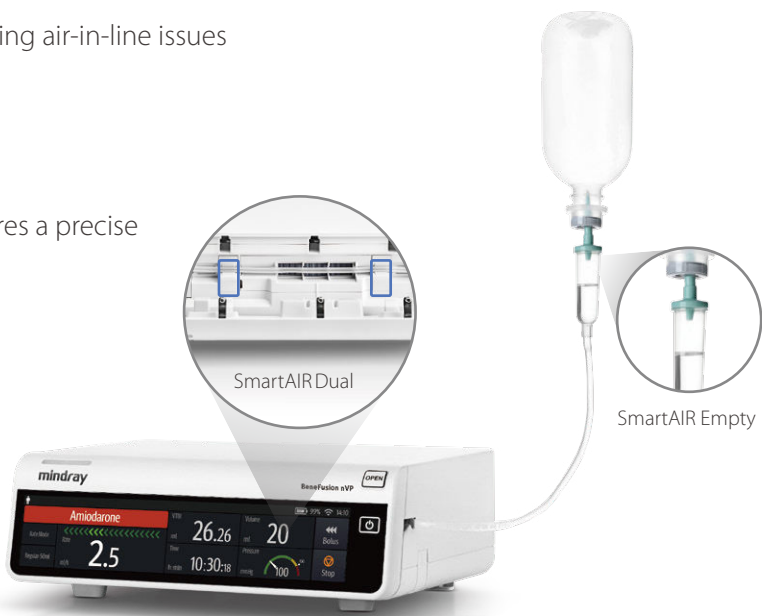- Compatible syringes as small as 1ml

SmartAIR

SmartAIR enhances the overall safety by monitoring air-in-line issues when administering infusion to a patient.

SmartAIR Dual
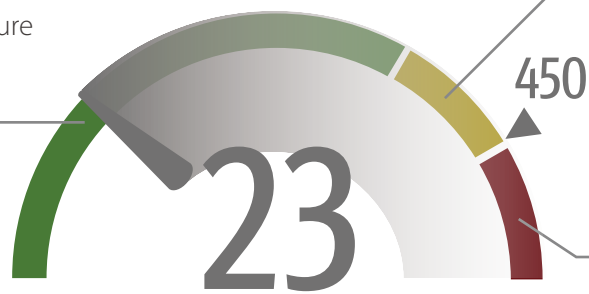Dual-sensor design of air bubble detection ensures a precise air-in-line alarm.

SmartAIR Empty
The innovative mechanism of empty container detection ensures timely awareness of infusion completion without any accessory.

SmartAIR Dual

SmartAIR Empty

Dynamic Pressure System (DPS)

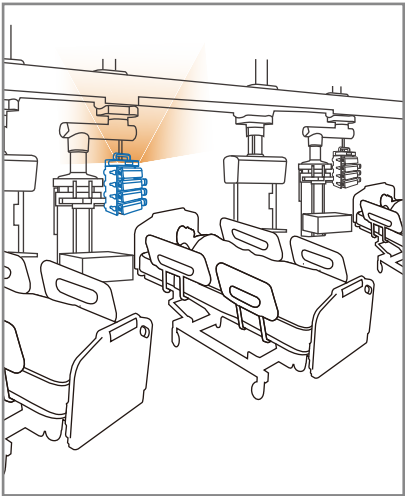Speedometer style indicator with numerical pressure to monitor the in-line pressure trend just with a glance.

Alert with a visual message about the possible occlusion before interrupting the infusion.
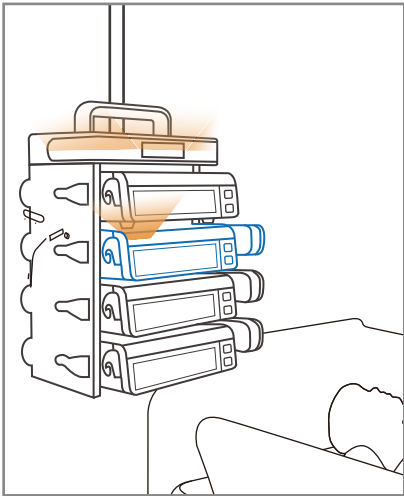
450

23

Auto-attempting mechanism enables infusion resume as early as possible to ensure continuous infusion.
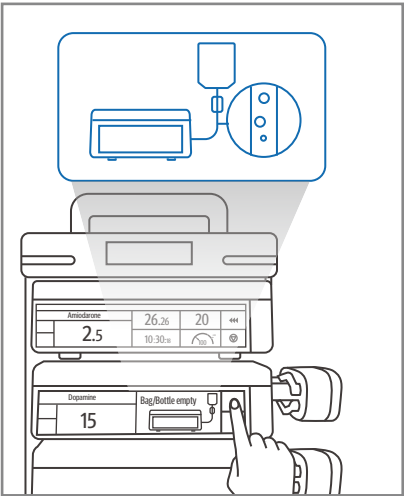
Guided Alarm Management

The highly visible alarm management enables users to fast locate and solve the problem.

Fast location of the bedside alarm with 270° visible alarm light on the BeneFusion nDS from a distance.

Fast location of the pump with an audible and visual alarm on BeneFusion nSP/nVP at bedside.

Fast location of the problem with an instructional animation displayed on the pump to aid problem resolution

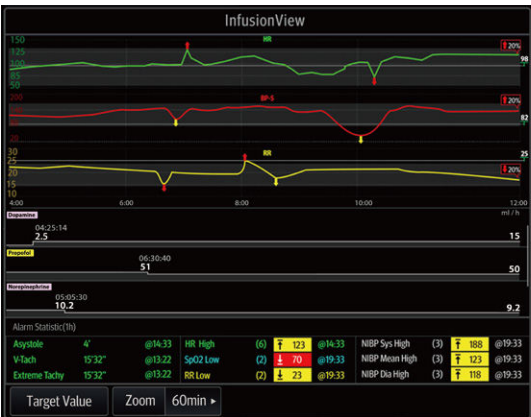# Managing drugs safely throughout the infusion

Color-coding system

- The color coding of drug name assists users to easily select and verify the correct drug.
- SafeDose™ Info software enables programming infusion parameters automatically to enhance efficiency.
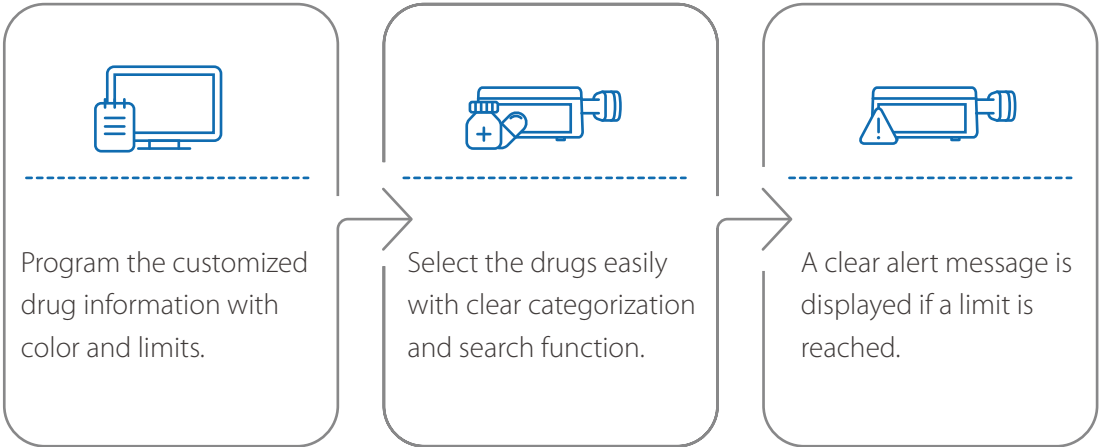
InfusionView

- Vital sign trend and alarm statistics align with the infusion information to provide a comprehensive understanding of a patient's condition.
- Guides users with the appropriate dose of drug when adjusting the infusion treatment.
- Assists users to optimize with more precise prescription by reviewing previous treatment up to 24h.

SafeDose™ DERS

The SafeDose™ DERS helps to reduce drug errors by preventing users from exceeding pre-set hard limits, and by requiring confirmation to override soft limits.

Program the customized drug information with color and limits.

Select the drugs easily with clear categorization and search function.

A clear alert message is displayed if a limit is reached.

Easy maintenance

- Manufacturing consistency establishes the foundation for easy maintenance
- Save plenty of time for BMEs with pre-configured consumables
- Simplify set calibration by uploading and distributing data easily

upload & merge

Network

batch calibration

Connected synergy

Centralized data management

- Able to monitor up to 72 nDS simultaneously
- Able to obtain infusion and alarm information anywhere at anytime
- Access to HIS/CIS/EMR through HL7 protocol

CIS   EMR   HIS

eGateway

Mobile viewer   CMS Viewer   BeneVision CMS   WorkStation   BeneFusion nCS

BeneLink

Integrated central monitoring

BeneVision CMS offers one-stop monitoring of all patients' vital sign and infusion treatment details, providing comprehensive information for clinical workers to improve the quality of patient care.

Closed-loop medication management

Assists clinical staff to reduce medication errors with barcode scanner by aligning prescription automatically, enhancing the work-flow efficiency.