Mindray

BeneFusion 5 Series
Infusion Pump System

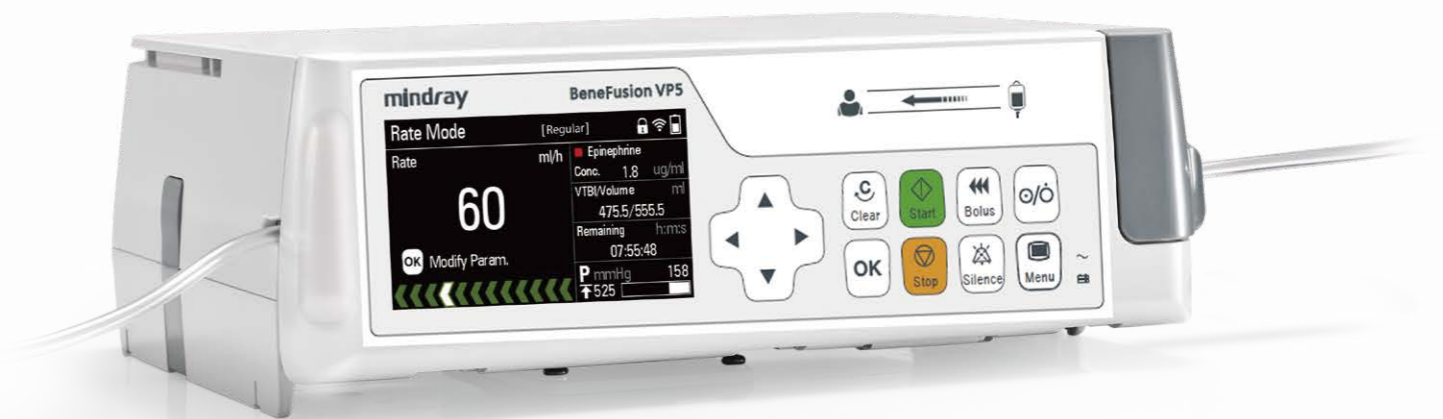# SAFE Infusion

Mindray

healthcare within reach

BeneFusion 5 series are the powerful partners for intravenous infusion that are designed with the concept of SAFE infusion.

The SAFE concept stands for Smart system, Accurate infusion, Friendly design, and Easy connection.
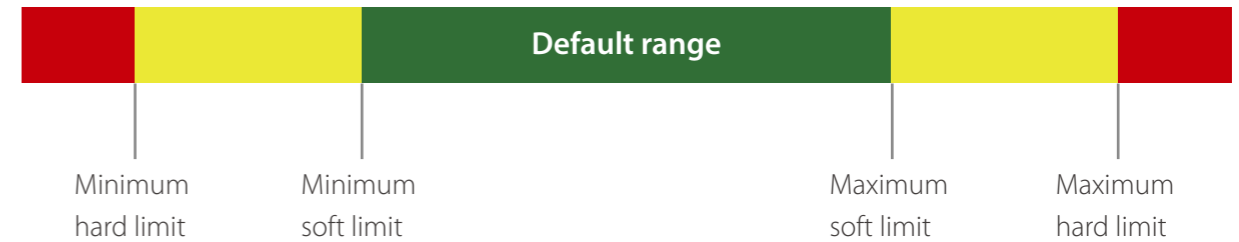
The concept comes with a set of state-of-the-art technology to provide considerate solutions for different clinical scenarios, as well as ensuring patients' safety.

Smart System

Fast Start

The first drop can be delivered in just 2 to 3 seconds, leading to a timely infusion therapy.

first drop
2 to **3** s
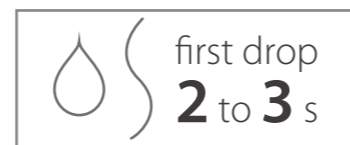
Intelligent Occlusion Management

Dynamic Pressure System (DPS)

- A wide range of occlusion detection to increase safety levels
- Graphical and numerical pressure indicators to predict occlusion alarm in advance.

P mmHg 370
450

P mmHg 430
450
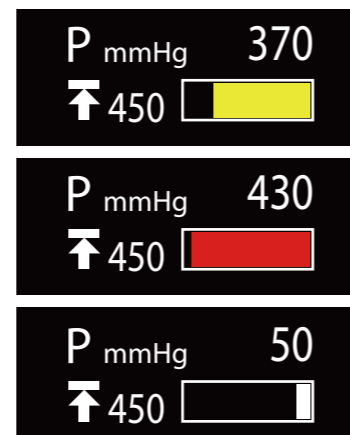
Anti-bolus

Unexpected bolus reduced when the occlusion occurs, releasing the high pressure to protect patients.
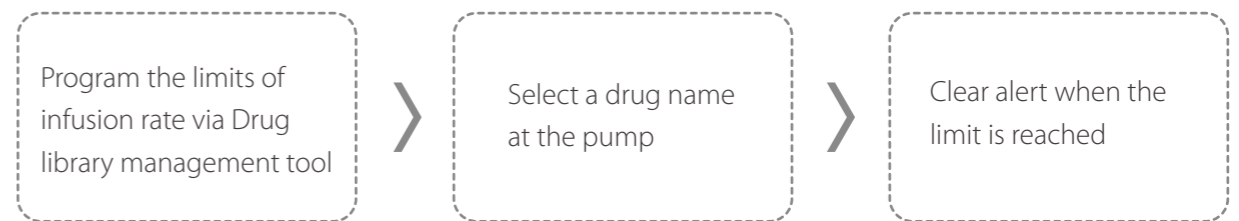
P mmHg 50
450

Dose Error Reduction System (DERS)

The DERS drug library assists in protecting patients by triggering the alarms when the actual dose reaches defined limits, ensuring patient safety.
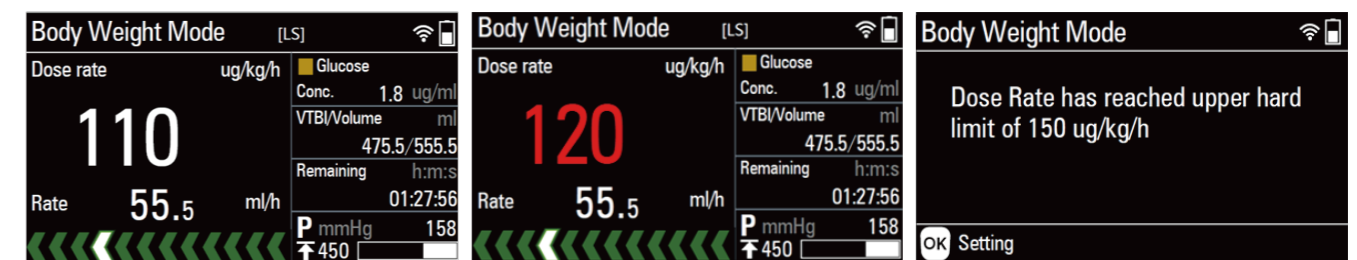
Default range

Minimum hard limit | Minimum soft limit | Maximum soft limit | Maximum hard limit

The Simplified Workflow

Program the limits of infusion rate via Drug library management tool ❯ Select a drug name at the pump ❯ Clear alert when the limit is reached

Smart Pump Interfaces

Body Weight Mode [LS]
Dose rate ug/kg/h
110
Rate 55.5 ml/h
Glucose
Conc. 1.8 ug/ml
VTBI/Volume ml
475.5/555.5
Remaining h:m:s
01:27:56
P mmHg 158
450

Body Weight Mode [LS]
Dose rate ug/kg/h
120
Rate 55.5 ml/h
Glucose
Conc. 1.8 ug/ml
VTBI/Volume ml
475.5/555.5
Remaining h:m:s
01:27:56
P mmHg 158
450

Body Weight Mode
Dose Rate has reached upper hard limit of 150 ug/kg/h
OK Setting

Colour-coded drug names | Coloured dose rate displayed when the soft limit is reached | Considerate reminders displayed when the hard limit is reached

Accurate Infusion

Consistent and precise performance

- Real-time high stability of infusions guaranteed by the overall mechanical accuracy
- High accuracy over long hours guaranteed by the compensatory algorithm to deformed IV sets

Both of them are achieved throughout the entire infusion process, avoiding unexpected harmfulness to patients.

High accuracy detection sensors

Assist in identifying risks caused by occlusion and air bubbles, ensuring a safe infusion.

A broad range of syringe compatibility

Compatible with syringes that range from 2ml to 60ml, contributing to great accuracy in general.

Pressure detector Minimum

75mmHg

Air sensor Minimum

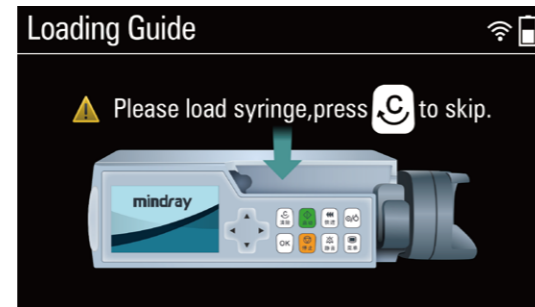**20**μL

Dedicated IV administration set

- Latex-free and DEHP-free dedicated lines
- Various types for satisfying different clinical needs
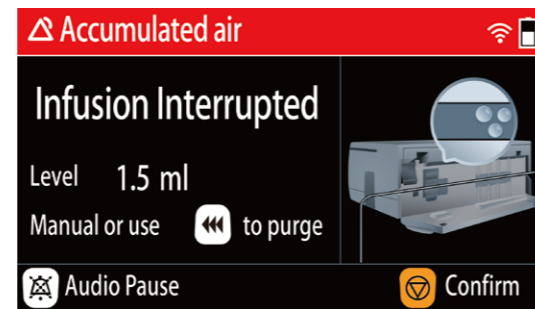- Extraordinary infusion accuracy guaranteed

Friendly Design

Quick Guide

On-screen instructions provides useful information to help avoid any improper operation.
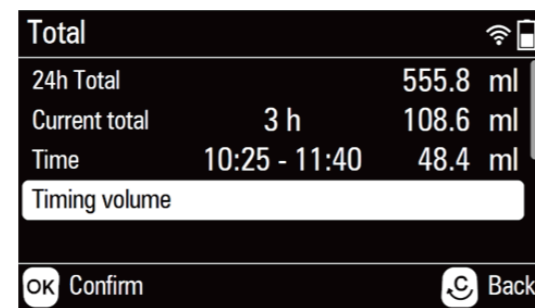

Loading Guide

⚠ Please load syringe, press Ⓒ to skip.

Graphical Alarm Display

Easy to identify any specific issue, helping to eliminate problems in time.

△ Accumulated air

Infusion Interrupted

Level 1.5 ml

Manual or use ◀◀◀ to purge

Audio Pause   Confirm

Volume Collection

Versatile enough to better collect the volume of infusions for different clinical scenarios, alleviating nursing workloads.

| Total		
24h Total		555.8 ml
Current total	3 h	108.6 ml
Time	10:25 - 11:40	48.4 ml
Timing volume		

OK Confirm   Ⓒ Back

The Portable Handle

VP5/SP5 can be equipped with a portable handle (BeneFusion PH5) for convenient transfer.

DS5 Docking Station

DS5 optimizes beside infusion management with one-power-cord design, integrated monitoring, flexible combination, as well as multi-channel function.
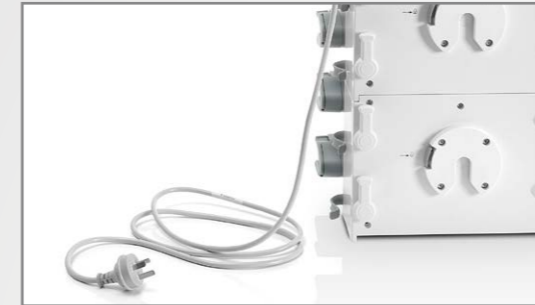
One power cord

Leads to a worry-free bedside management

Flexible combination

2 to 24 slots available for combining VP5 and SP5 in any order

🛏 10	Li Qin		☒ ⊞ ▯
1	injecting	Propofol	
2	injecting	Remifentanil	
3	2 min	Rocuronium	
4	5 min	None	
Total volume		36.92	ml

Integrated monitoring

Presents key information of multiple pumps

Auto. multi-channel relay

Forward channel

1 Start running after NO. x pump

OK Setting   Ⓒ Return
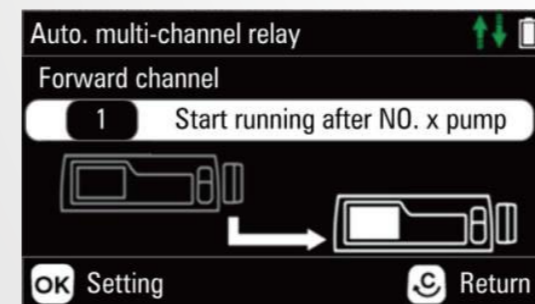
Automatic multi-channel relay

Smooth drug-giving enable continuous infusions

DS5 Basic

A simplified version of DS5 that provides a cost-effective solution without integrated monitoring
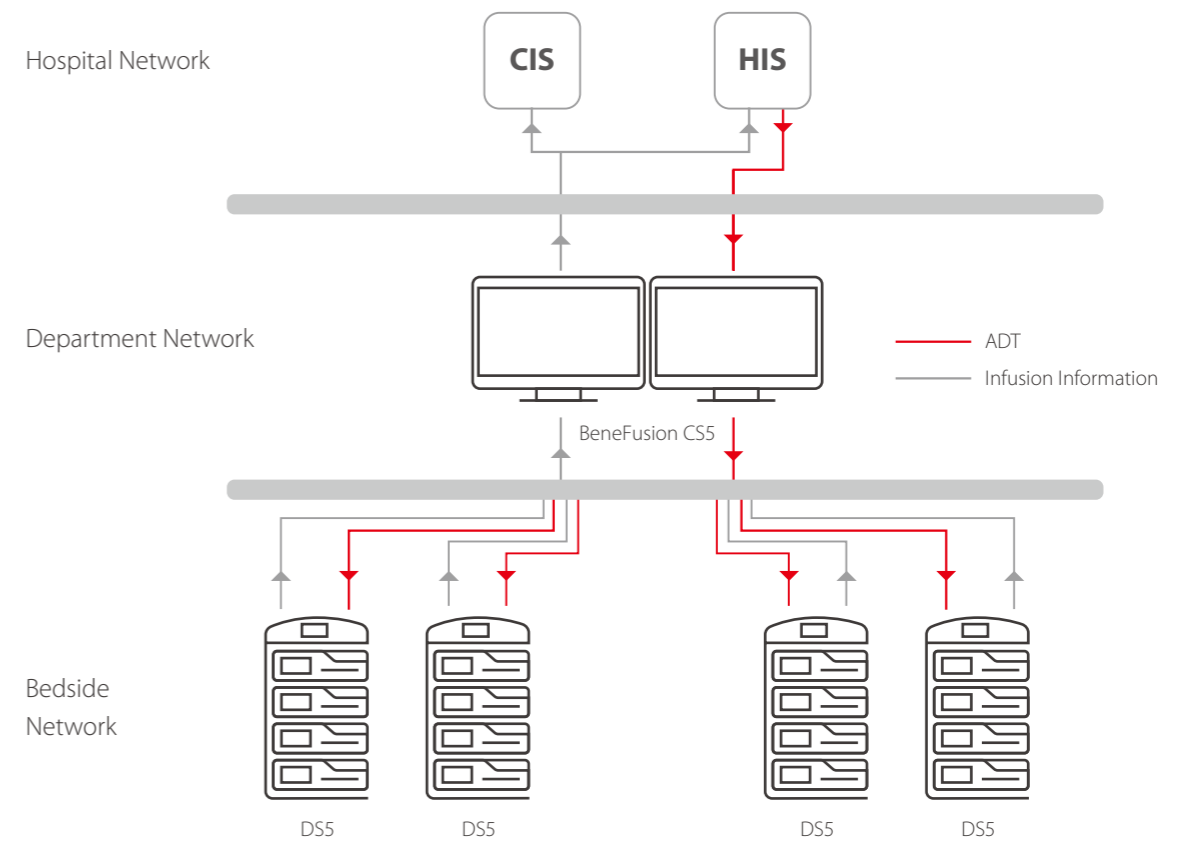
Easy Connection

Integration and Synergy

- Vital information from infusions, including drug name, rate and accumulated volume can be synchronized and shown on BeneView N series patient monitor.
- Drug-related physiological parameters, such as HR, BP, RESP, BIS and so on, to provide a comprehensive picture for medical staff to diagnose and prescribe the patient.

DS5 → BeneLink → N series patient monitor → Central Station → Hospital System (HIS/CIS)
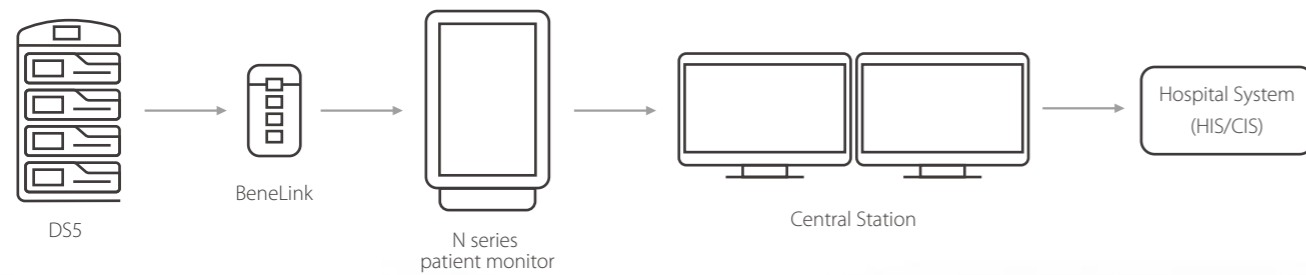
Centralized Management

BeneFusion CS5

- Great capability to supervise up to 64 DS5 or 512 BeneFusion pumps simultaneously.
- Digital network with centralized management of infusion data, which greatly increases work efficiency and alleviates workloads.
- HL7 protocol allows BeneFusion pumps to be integrated into the hospital network, such as CIS, HIS and so on, which assists the hospital to implement a paperless environment.

Hospital Network — CIS HIS

Department Network — ADT, Infusion Information

BeneFusion CS5

Bedside Network — DS5 DS5 DS5 DS5

Interface of multiple beds

Interface of single bed