

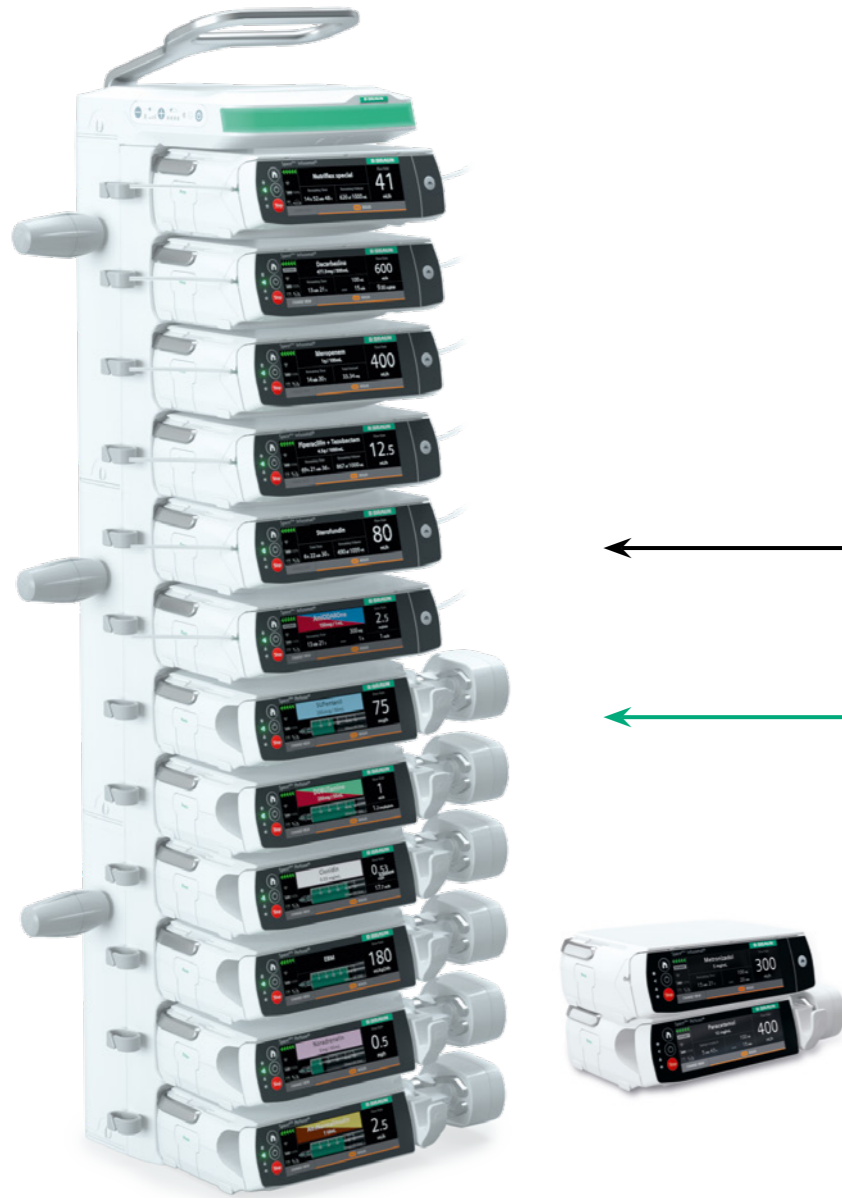
# Space<sup>®</sup>plus & OnlineSuite<sup>plus</sup>

**B|BRAUN**  
SHARING EXPERTISE



# A milestone in medication safety for comprehensive infusion therapies.

#spaceplus



Welcome to Space<sup>plus</sup> & OnlineSuite<sup>plus</sup> – our new Smart Infusion Ecosystem!

Space<sup>plus</sup> and OnlineSuite<sup>plus</sup> make up a unique ecosystem that allows the seamless flow of data. Each pump is equipped with an integrated WiFi module, enables a continuous bi-directional exchange of data – even during transport.



70 YEARS  
OF EXPERIENCE  
IN INFUSION  
PUMP SYSTEMS  
SINCE 1951

Engineered  
& Made  
in Germany



# Experts for Experts

#userinterface

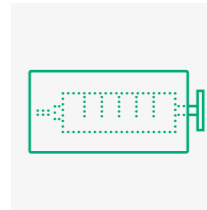


# Technology with a touch Efficiency with a smile



## Syringe status via UI

The new user interface makes it even easier to schedule syringe changes easily, as the fill status of the syringe is visualized on the screen.



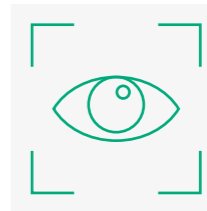
## Intuitive user interface

The self-explanatory user interface guides healthcare professionals safely with an innovative usability dimension.



## At a glance

The display is designed to give healthcare professionals an overview of infusion therapy in seconds.



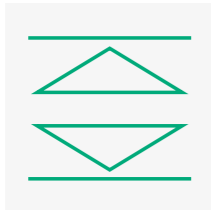
## Ease by design.

The operation of Space<sup>plus</sup> is highly **user-friendly and intuitive** and can be customized to clinical workflows in order to reduce medication errors.

Both the Infusomat<sup>®</sup> and the Perfusor<sup>®</sup> have the **same design, interface, and menu structure**. This means less training for healthcare professionals and a reduced risk of incorrect handling.

Space<sup>plus</sup> allows to **react quickly, appropriately, and safely**.

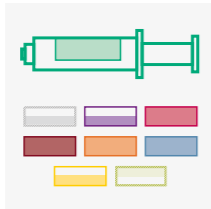
# Even more performance Even more space



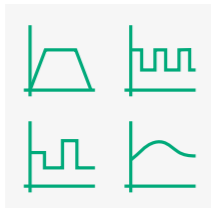
### DoseGuard™ –

The safer, The better

DoseGuard™ helps to reduce the risk of medication errors by adding safety limits to therapies.



**Drug color coding**  
Space<sup>plus</sup> offers multiple and individual drug color codes to support safety at first glance.



### Various therapy modes

Space<sup>plus</sup> offers a variety of therapy modes for infusion, pain- and nutrition therapies. For hospital-wide usage - no matter where!

**Space<sup>plus</sup> DrugLibrary Manager**  
Manage medication data centrally to configure your drug library according to the care unit and patient-specific needs.

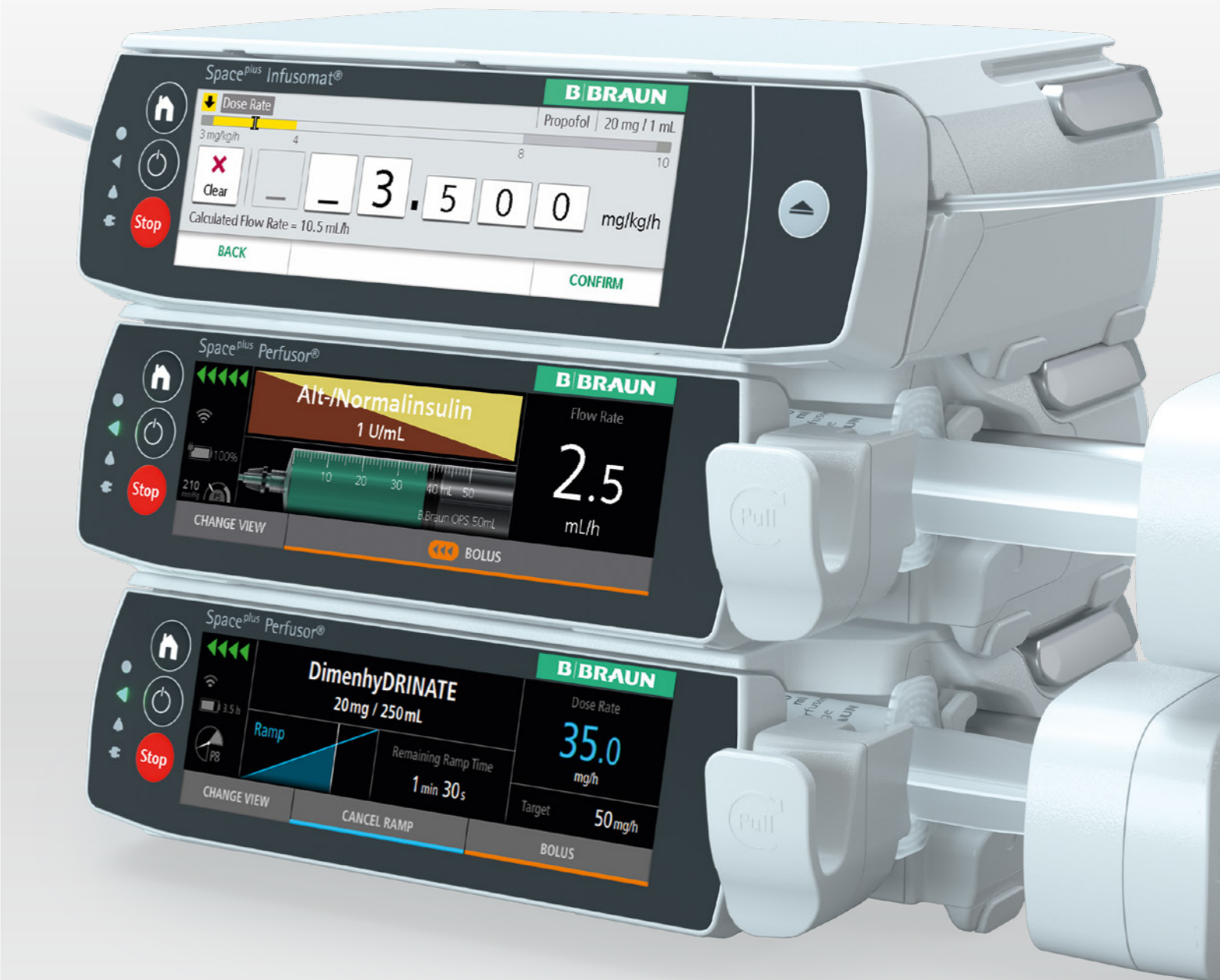


### Thinking in larger scales.

Space<sup>plus</sup> covers a wide range of therapies for **adults, pediatrics, and neonates** for the delivery of parenteral and enteral fluids. These routes of administration include **intravenous, intra-arterial, subcutaneous, epidural, and enteral.**

**Therapy modes** help to reduce nurse workloads and allow for the higher standardization of therapies within the respective limits in order to reduce medication errors.

The system allows for **seamless workflows** during intra- and interhospital transfer as well as during MR scans with the respective accessory.



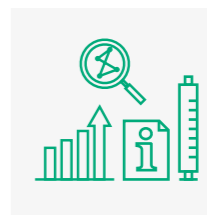
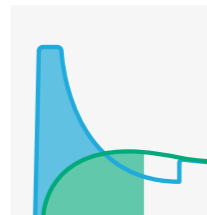
# Target controlled infusion (TCI) Algorithm-based TIVA



- Eleveld
- Schnider
- Marsh
- Minto
- Gepts
- ...

A variety of algorithms  
TCI models are available for various anesthetic drugs. There are specific models for children, adults, obese patients etc. implemented.

**Graphical TCI curve**  
Visualization of the status of the anesthesia via a graphical overview as a user-friendly technique for the anaesthetists.



**Information density**  
Unique combination of the colour graph and further TCI relevant data, such as titrating the target, drug name and remaining volume in the syringe.

## Target Controlled Infusion with Infusion Pumps

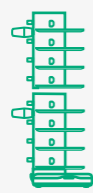
Target Controlled Infusion (TCI) is a standardized infusion technique for the administration of opioids, propofol and other anesthetics in anesthesia.

TCI comprises the implementation of pharmacologic models in infusion pumps through specific algorithms. Based on these algorithms, "TCI pumps" control the infusion rates in order to reach and maintain predefined concentrations (= targets).

# Trust in experience For quality of life

## IP44 moisture protection

Our pump is first in class with IP44 moisture protection against splashing water from any direction.



## Advanced workplace design

Giant possibilities in the smallest of spaces: The modular system allows for configurations of up to 24 pumps.

## Carry handle

The integrated carry handle supports the easy transportation of up to three stacked pumps.



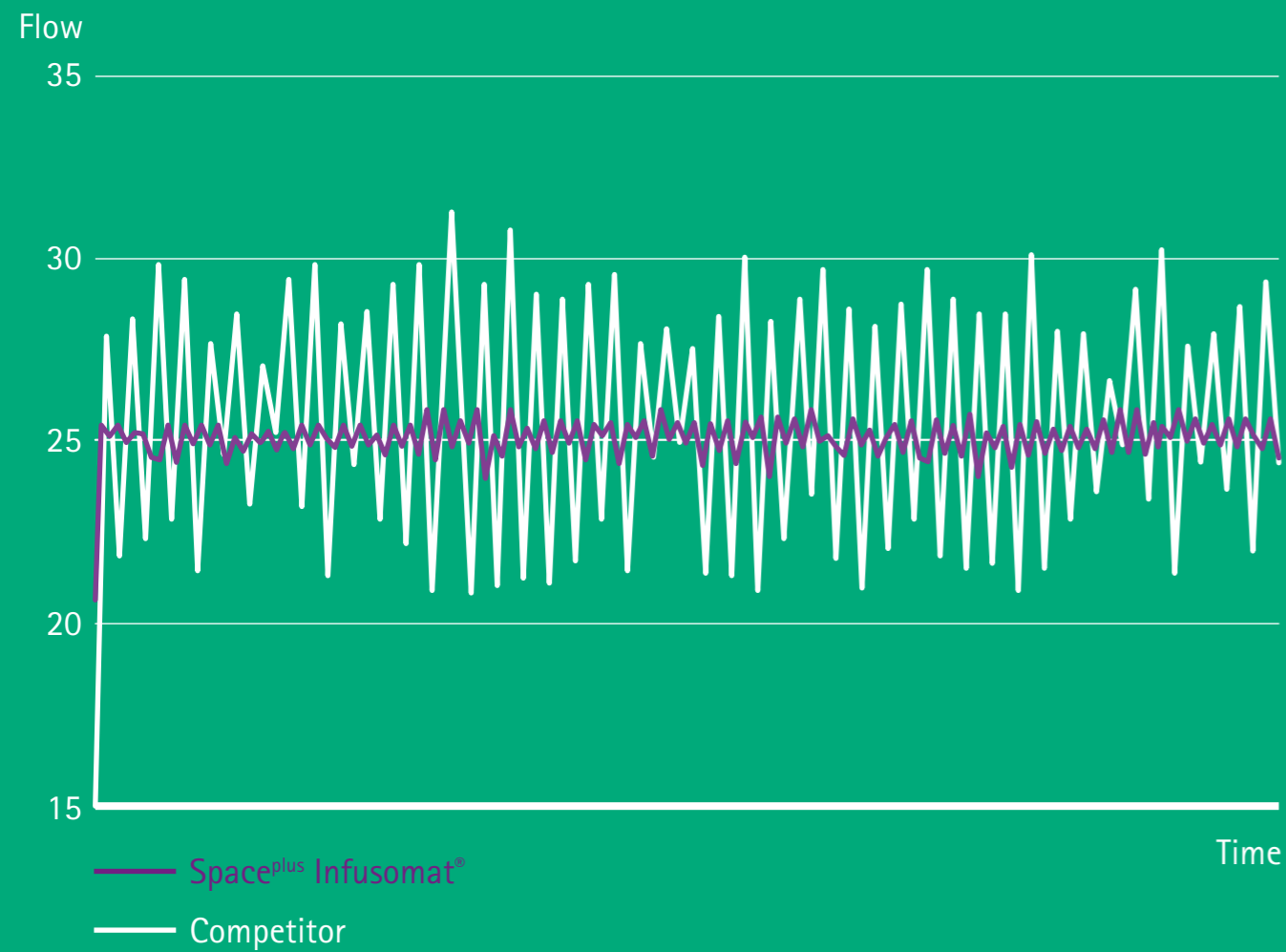
## Benchmark for workplace design and flexibility.

Easy and tool-free **connection of up to 6 stations** that can be extended to a workstation for **up to 24 infusion pumps**.

The station displays visual and audible alarms centrally, allowing for quicker alarm localization within the room. The innovative design supports routine tasks like cleaning and disinfection.



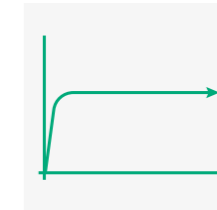
Flow accuracy at 25 ml/h



These graphs show the accuracy and uniformity of flow over time. It must be remembered that the delivery characteristics and the delivery accuracy are significantly affected by the disposable used.

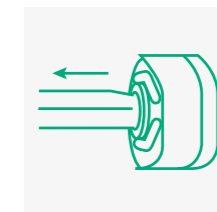
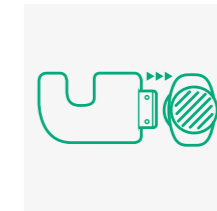
Accurate and consistent flow rate are particularly important for high-alert medications that pose significant risk when improperly delivered.

## Interact with technology Interface with life



**Outstanding accuracy**  
Precision determines health. Space<sup>plus</sup> Perfusor<sup>®</sup> and Space<sup>plus</sup> Infusomat<sup>®</sup> introduce new dimensions of delivery rate accuracy based on advanced mechanical drive technology.

**Syringe piston brake**  
The unique syringe piston brake helps to prevent freeflow and handling mistakes during syringe change.



**Full automatic drive**  
The automatic drive technology allows for outstanding start-up when changing disposables: it's fast, safe, and highly accurate.

### Infusomat<sup>®</sup> meets Perfusor<sup>®</sup>

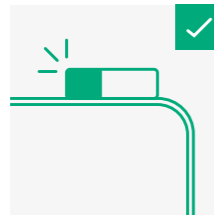
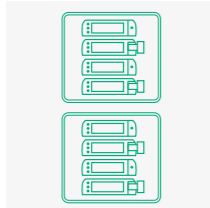
The innovative drive technology not only enables **outstanding startup and delivery performance**, but also delivers safety and unique convenience when changing disposables - **freeflow is reliably prevented**.

Catecholamines are also not a problem, as they can be administered with the Infusomat<sup>®</sup> **due to consistently high precision**.



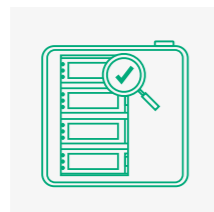
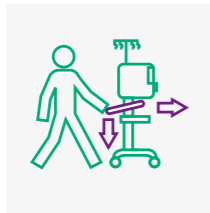
# Space<sup>plus</sup> MRI Seamless infusion management

Up to eight pumps  
Customizable with up to  
8 Space<sup>plus</sup> Infusomat<sup>®</sup>  
or Perfusor<sup>®</sup>.



**Tesla MFI**  
Integrated *Tesla MFI* (Magnetic Field Indicator) continuously monitors magnetic field strength to ensure proper placement.

**Deadman brake**  
Space<sup>plus</sup> MRI Station is automatically locked when the deadman's brake handle is released.

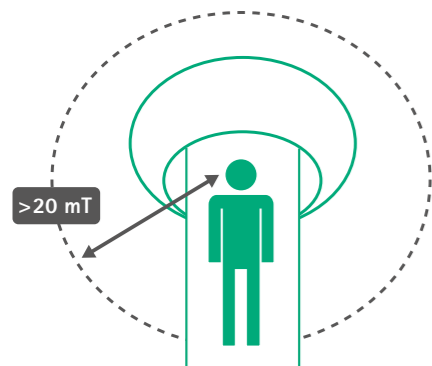


**Large-sized alarm display**  
Infusion parameters as well as alarms always visible for caregivers during MR scan.

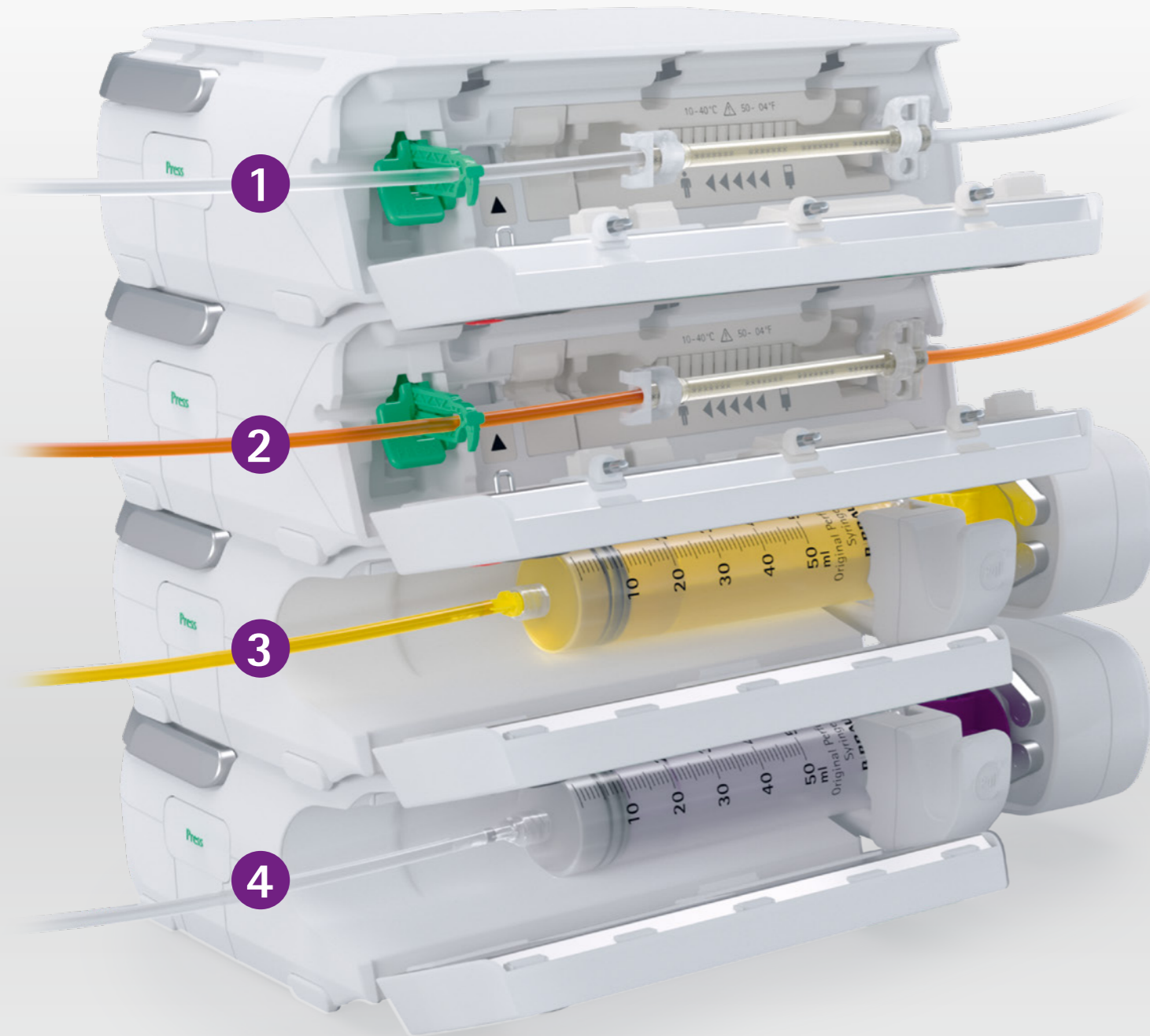
## Flexible and seamless patient path during imaging process.

MR scanners emit strong magnetic fields that can cause functional disturbances and can sometimes permanently damage medical devices. Likewise, in the event of electromagnetic interference created by the pumps the quality of the MR images may be negatively affected.

The Space<sup>plus</sup> MRI Station is designed to shield infusion pumps against 1.5-T and 3.0-T magnetic fields, to protect the MR scanner and ensure interference-free images. Gone are the days of long infusion lines or upgrades to dedicated MRI-compatible infusion pumps.



# A wide range of therapies Including dedicated disposables



**1 Standard**  
Infusion therapy,  
TCI, TIVA

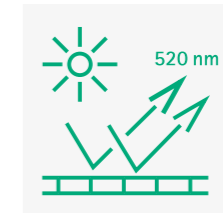
**2 Light protected**  
Photosensitive  
Medication

**3 NRFit®**  
Pain Therapy

**4 ENFit®**  
Nutrition Therapy

### SafeSet - AirStop

The unique filter membrane at the bottom of the drip chamber prevents air from entering the connection line and ensures the line cannot run empty - thus leading to less disconnection of lines.



**Light Protected**  
Increased security through light-protected products, which supports the early detection of air bubbles and particles.

### NRFit®

More safety in the area of regional anesthesia to avoid risks of misconnections between neuraxial and intravenous application. Guidance by connector design and color coding.



**ENFit®**  
More safety in the area of enteral feeding to avoid risks of misconnections. Guidance by connector design and color coding.

## Dedicated Therapies, dedicated disposables.

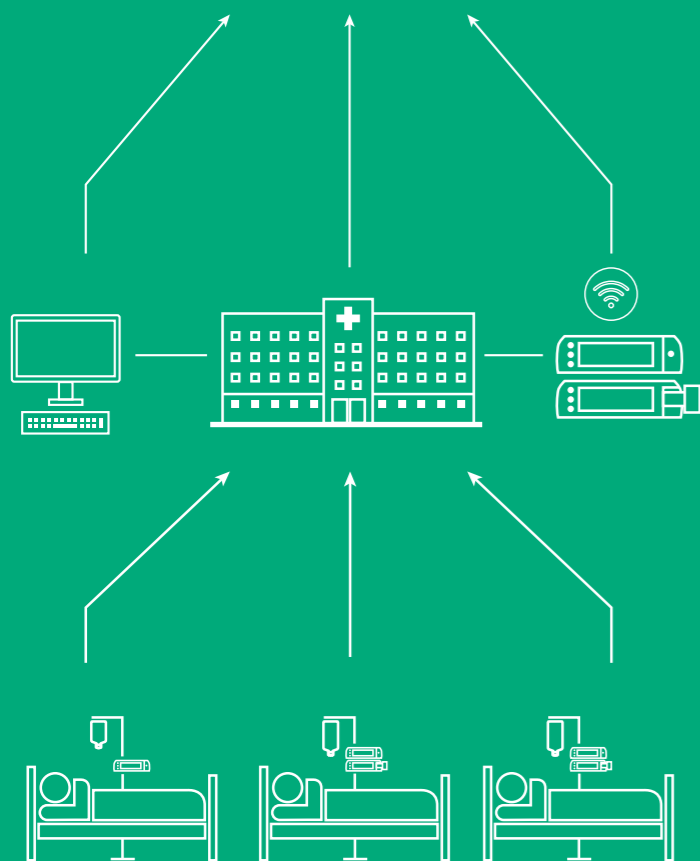
The dedicated disposables cover the full range of different therapies like standard-, light-protected-, transfusion-, pain- and antibiotic-therapy, closed systems for oncology, and disposables for enteral nutrition.

With the Original Perfusor® syringes, B. Braun offers three-part disposable syringes that have an excellent sliding performance and add the excellent delivery characteristics of the Space<sup>plus</sup> Perfusor®.

Additionally, the Original Perfusor® lines provide the option of color-coding to more quickly identify highly potent drugs and to reduce the risk of confusion.

**B|BRAUN**  
Health Cloud

**OnlineSuite<sup>plus</sup>**  
powered by B. Braun Health Cloud



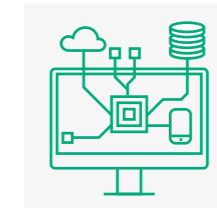
The optional B. Braun Health Cloud connection provides additional benefits to the hospital with fully automated updates and upgrades of the software, access to e-learning and further product information.

OnlineSuite<sup>plus</sup> is the innovative IT platform providing software applications that help users to increase safety, efficiency, and therapy performance within the entire hospital.

Space<sup>plus</sup> infusions pumps are seamlessly connected to the hospital IT network thanks to the integrated WiFi module.

All infusion pumps may be used flexibly either in the station, as a single pump, or on transport.

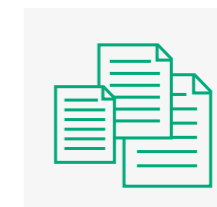
## Smart technology Smart hospitals



**Interoperability**  
Engineered to be seamlessly integrated into the hospital IT environment using the bi-directional HL7-IHE framework for data communication.



**Cyber Security**  
Communication through the hospital network between the Space<sup>plus</sup> infusion pumps and the OnlineSuite<sup>plus</sup> servers is encrypted.



**Seamless Documentation**  
Space<sup>plus</sup> infusions pumps introduce an internal data buffer for data caching when no network connection is available.

### Connecting an ecosystem.

Space<sup>plus</sup> in combination with OnlineSuite<sup>plus</sup> is **the digital infusion system** for hospitals that want to offer their patients comprehensive and safe infusion therapy with maximum medical options.

It is easy to integrate, with state-of-the-art interoperability into hospital information systems and an advanced approach to more **cybersecurity**. The Space<sup>plus</sup> system is the digital solution of choice for the healthcare sector.



# OneView<sup>plus</sup>

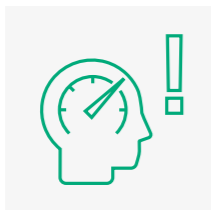
## Efficient visual ward overview



**Centralized monitoring**  
Increased efficiency through centralization of the therapy overview.



**Remote insights**  
The Distributed Information System (DIS) provides users with real-time data about the course of therapy – even remotely.



**Real-time monitoring**  
Live information about alarm reason, source and priority to save time and effort.

### Improved workflows in the infusion therapy

The OneViewplus application is part of the Distributed Information System (DIS). It opens up new opportunities for health care professionals to design their workflows around infusion therapy: Thanks to OneViewplus, you always have an overview on your ward.

Even from a remote location, you can check the status of any infusion pump connected to the network. Real-time access to therapy-related information such as dosage, infused volume, and remaining infusion time enables you to proactively design your clinical processes and workflows, thus increasing efficiency.



# ConAct Medical Device Interoperability

**Silent ICU**  
A smart, secure alarm forwarding and prioritization can support you to create a quieter an less stress-full ICU.



**Open standard**  
The system is based on the open industry standard ISO / IEEE 11073 SDC for manufacturer-independent networking of medical devices.



**Broader picture due to interoperability**  
Device-to-device communication in a bidirectional manner organize alarms from different sources.



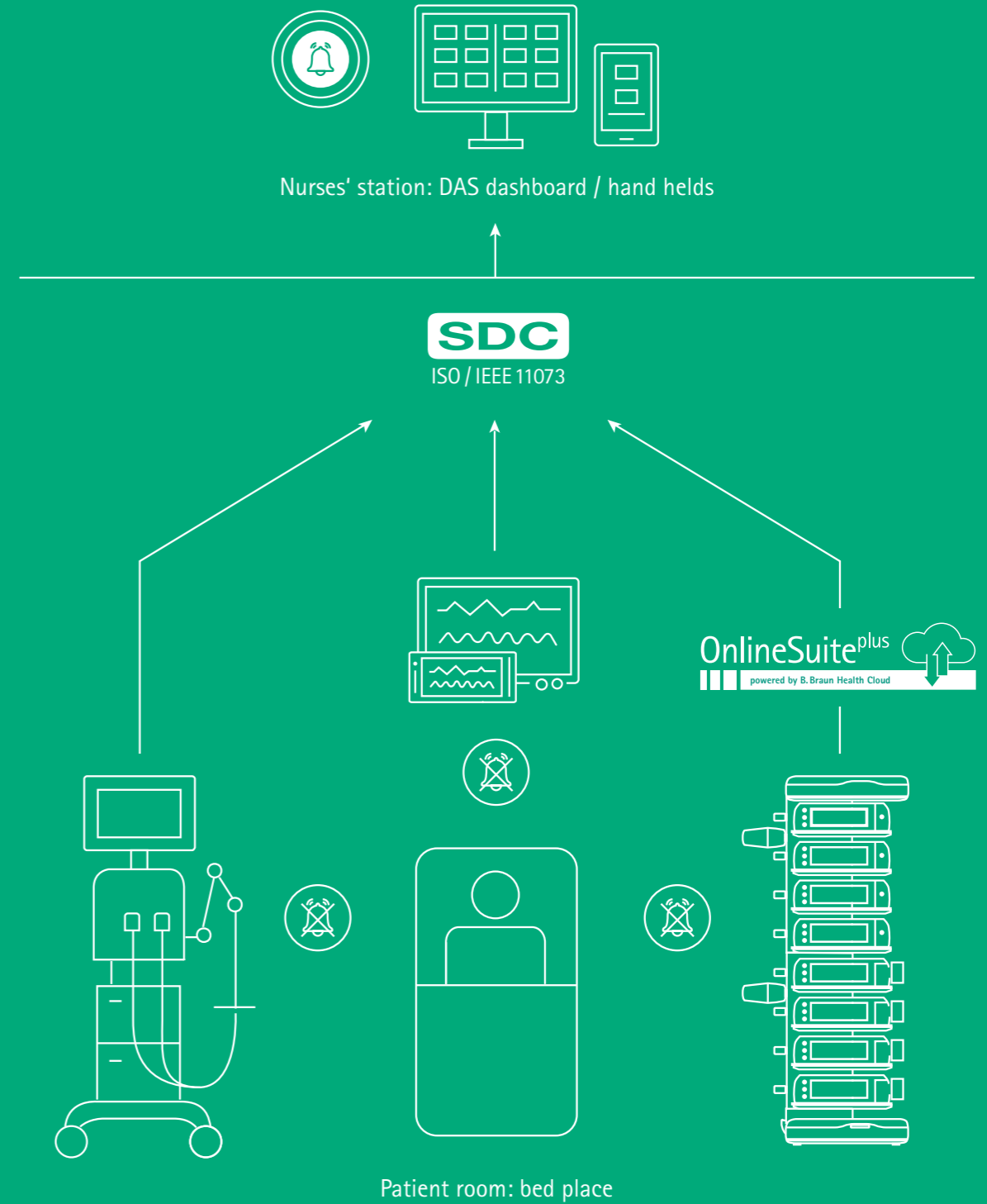
## What is ConAct?

ConAct connects medical devices to enable healthcare professionals to act efficiently.

The ConAct application (SDC gateway) enables interaction and device-to-device integration at the hospital bed using an open standard IEEE 11073 SDC.

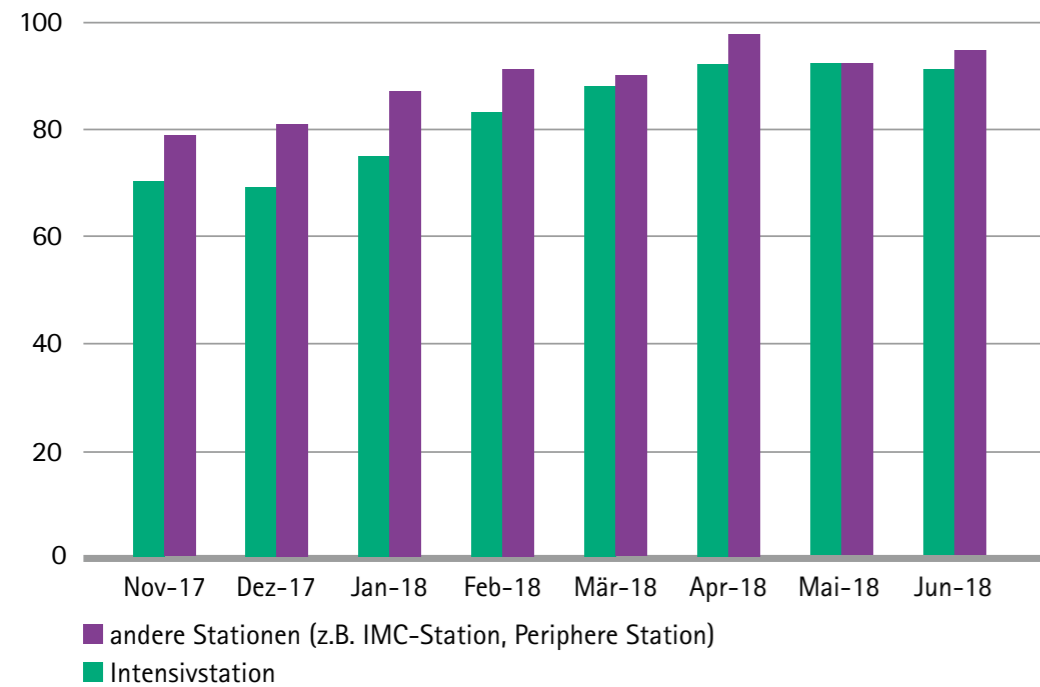
This new standard is used to exchange device- and dataparameters bidirectionally. One use case is the distributed alarm system (DAS). DAS means that alarms are securely distributed to an external system while the alarm-generating device remains silent.

# Silent ICU Collaboration

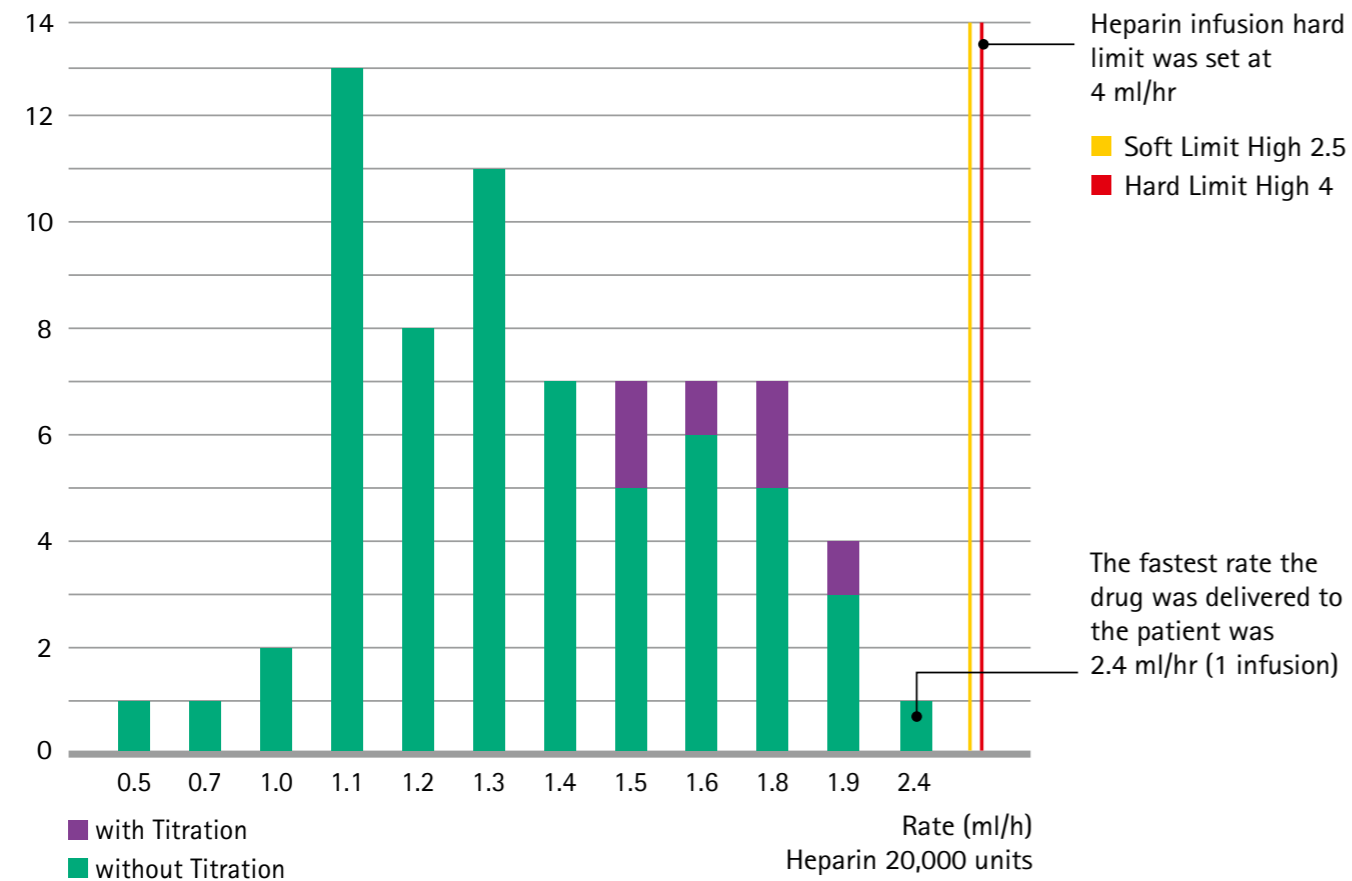


Silent alarms will be only beneficial when **all alarms at the bed place** are silent and transferred to DAS dashboard, this is including the alarms from different devices.

Medikamentendatenbank-Compliance pro Station (in %)



Heparin (Amount of Infusions)

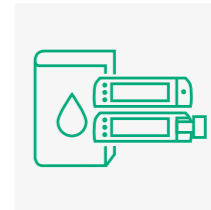


# DoseTrac<sup>plus</sup>

## Reporting application for added insights

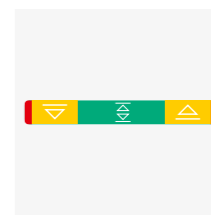
### Drug library compliance

To ensure compliance with the safe use of injectable medications, regular analysis is essential. Reporting contributes to the optimization of the drug database.



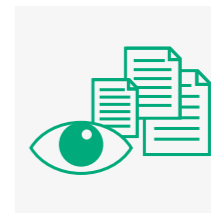
### Hard limit alert

Summary of all infusion alerts, overrides of limits to help clinicians reduce workarounds and optimize drug library.



### Further reportings

The information generated can help identify optimization options for fleet management and improve targeted training of clinical staff in the correct use of the drug library to reduce medication errors.



### What is DoseTrac<sup>plus</sup>?

DoseTrac<sup>plus</sup> is the B.Braun application which provides a broad range of real-time data that can support insights into avoidance of potential medication errors. It supports the reporting of infusion practice and process improvements to help hospitals improve patient safety.

DoseTrac<sup>plus</sup> reports can be analyzed to optimize fleet management, gain insights into previous infusion therapies, and evaluate areas where drug library improvement may be needed. This includes adjusting the drug library to ensure alignment between pharmacy policy and clinical practice.



# DoseLink<sup>plus</sup>

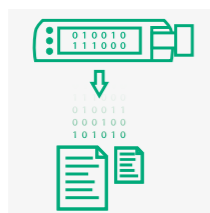
## Integration & interoperability

**Auto-Documentation**  
Infusion data into the EMR helps support hospitals with accurate and timely data collection in order to support their seamless documentation.



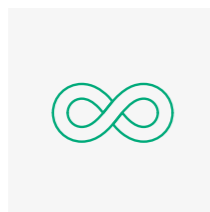
### AutoProgramming

AutoProgramming minimizes the risk of error at the point of care by sending prescription data directly to the Space<sup>®</sup>plus pump from the patient's record.



### Buffering

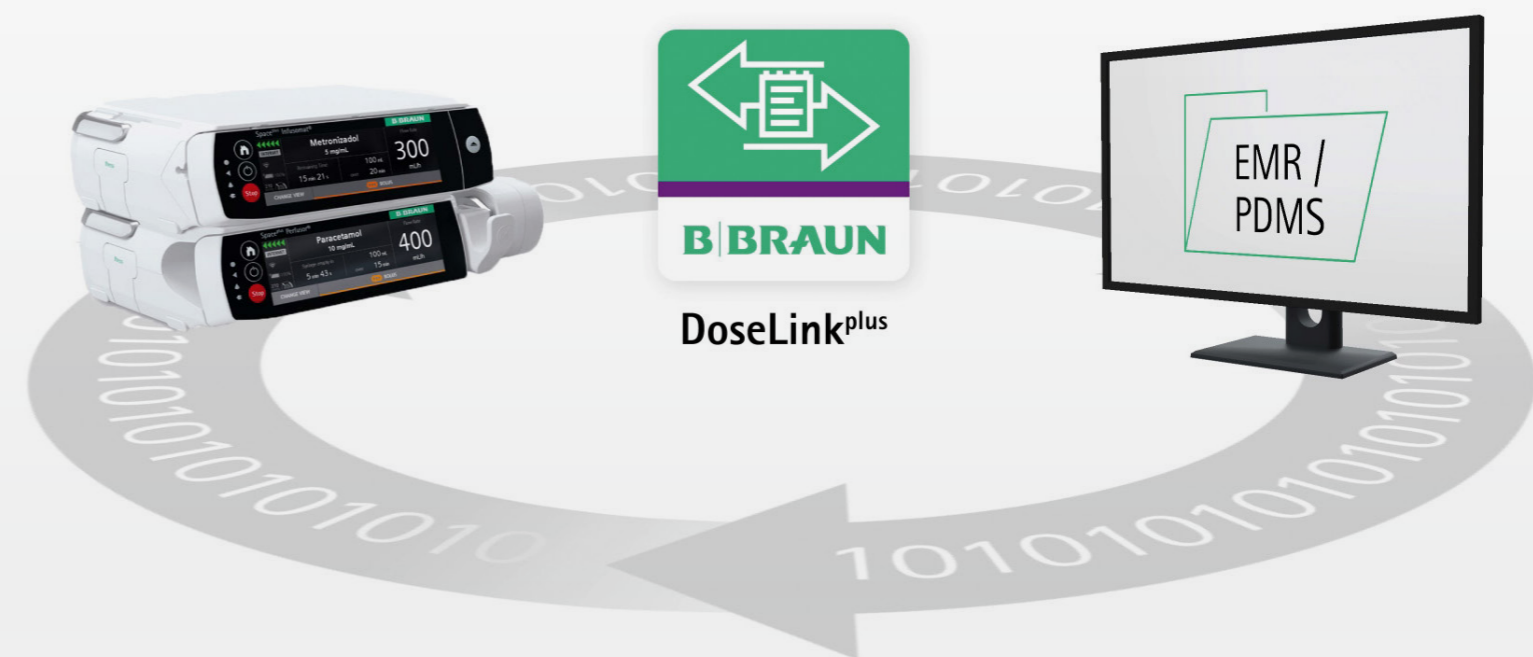
Space<sup>®</sup>plus pumps buffer data at least eight hours ensuring no information is lost in transfer situations, or if any network issues occur.



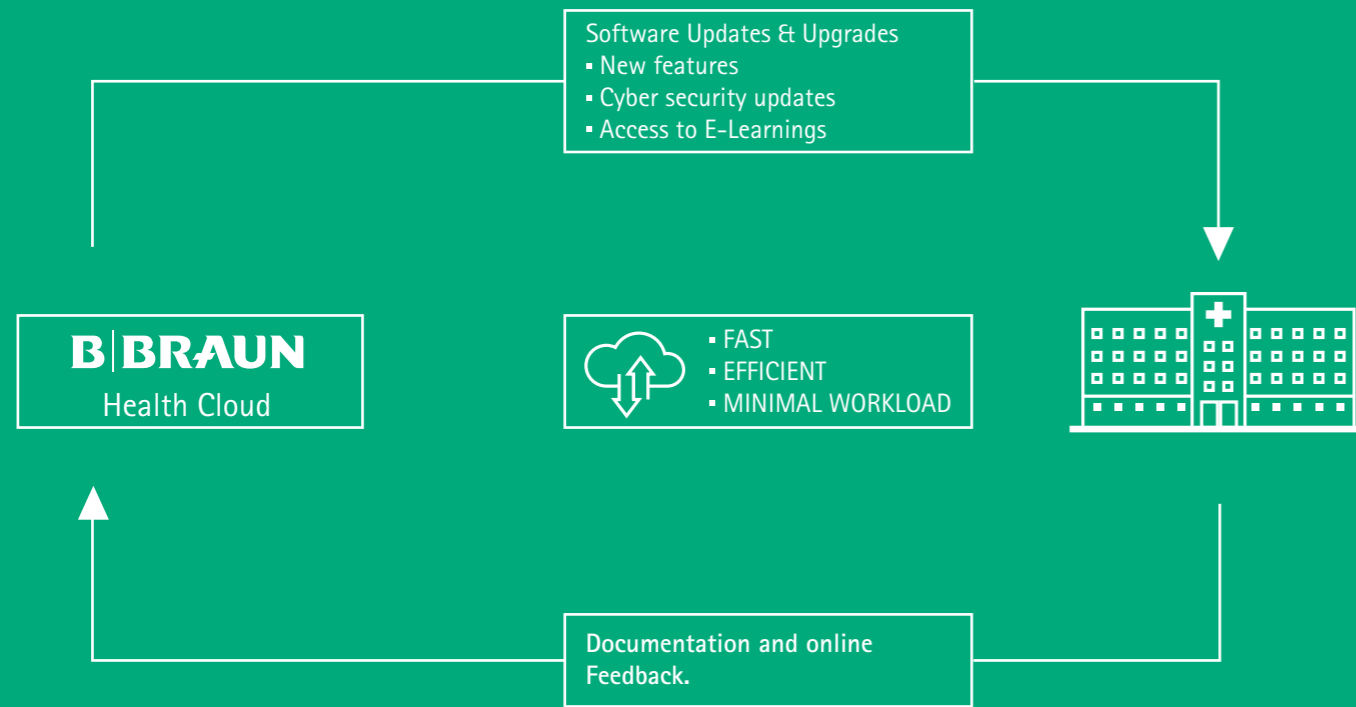
### What is DoseLink<sup>plus</sup>?

The DoseLink<sup>plus</sup> application enables Space<sup>®</sup>plus infusion devices to be integrated with a wide range of 3rd party systems such as Electronic Medical Record (EMR) systems, alarm management systems and asset management systems.

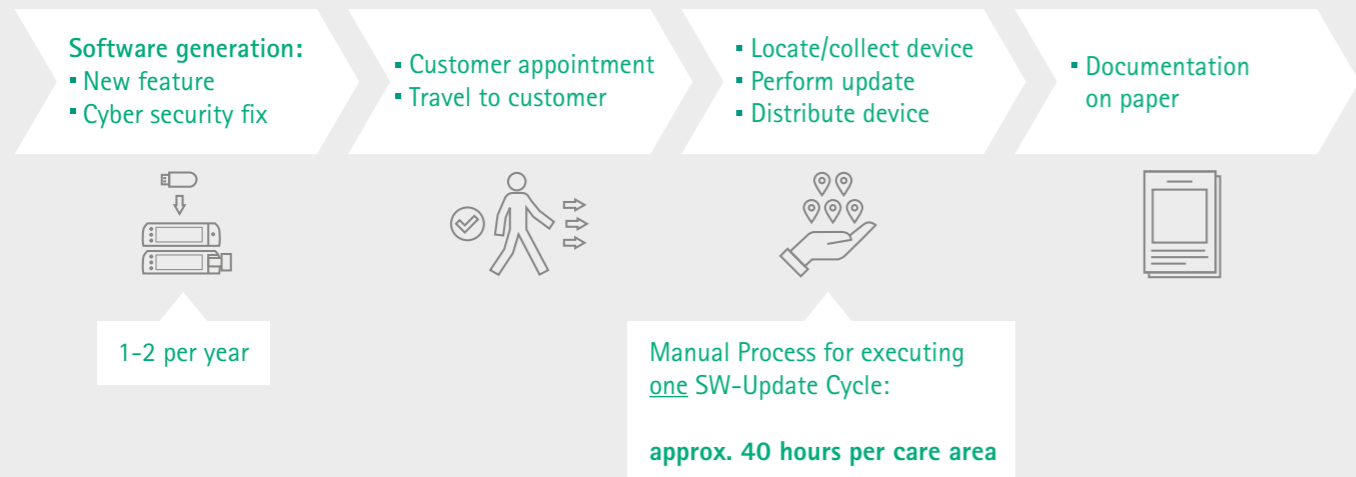
DoseLink<sup>plus</sup> conforms to the HL7/IHE standards, facilitating flexible integration of the Space<sup>®</sup>plus platform with other systems that are compatible with these standards.



# Digital infusion pump updates



# Manual infusion pump updates



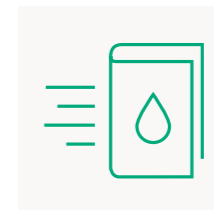
Manual processes for infusion pump updates are time consuming, interrupt clinical workflows due to the unavailability of infusion pumps during update procedures, and can last several weeks.

# Make Progress Not miles

**Zero touch deployment**  
Remote updates of infusion pumps via the hospital network without interrupting clinical workflows.



**Drug libraries on the fly**  
The drug library and firmware data are always up to date on the infusion pumps.



**Always the latest software**  
The B. Braun Health Cloud provides direct access to the latest software, E-Learnings, and further product information.

## Driving Digitalization. Healthcare 4.0.

Efficient processes for updating infusion devices with new **software and drug library data as well as disposable and configuration files** through the hospital's network is an essential time-saving benefit for the biomedical engineering department.

Equally important from a clinical perspective is the fact that infusion therapy is not interrupted during the controlled **transfer of updates.**



**DeviceManager<sup>plus</sup>**  
Technicians' centralized toolbox for managing infusion pumps across the entire hospital via its network.



#spaceplus4u

---

For the pragmatic. For the ones searching – and finding. For the many, not the few. For the early adopters, always striving for more.

For the nurses and the physicians.  
For inventors, creators, makers.  
And of course, for the patients.

For the digital natives.  
For the experts.

**For You**

**Space<sup>®</sup>plus**

---



