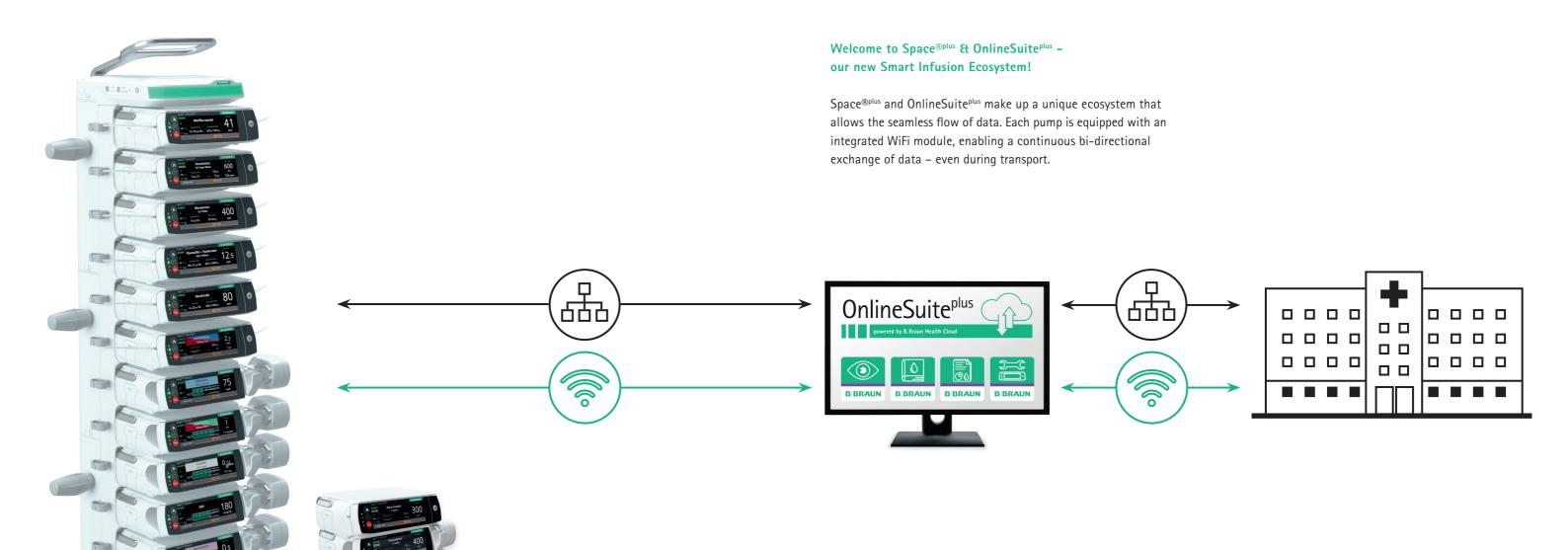


# Space®plus & & OnlineSuiteplus



# A milestone in medication safety for comprehensive infusion therapies.

#spaceplus



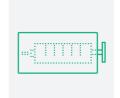




## Touch screen technology Highly visible colour display

#### 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 visualised on the screen.



#### Touchscreen user interface

The touchscreen colour display guides healthcare professionals through therapy settings and options.

#### At a glance

Even from a distance, the active agent of a running infusion or pump alarm can be identified.



#### Ease by design.

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

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

Space®plus allows one to react quickly and appropriately.

## Even more performance Even more space



### DoseGuard<sup>™</sup> – The safer, the better

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

#### Drug colour coding

Space®plus offers multiple and individual drug colour codes to support safety at first glance.



#### Various therapy modes

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



Space®plus 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, paediatrics and neonates for the delivery of parenteral and enteral fluids. These routes of administration include intravenous, intra-arterial, subcutaneous, epidural and enteral.

Therapy modes and limits to customise drug profiles reflecting hospital protocols, reducing nurse workloads and reducing medication errors.

The system allows for **seamless workflows** during intraand interhospital transfer as well as during MRI scans with the respective accessory.















# Award winning workplace design and flexibility

#### IP44 moisture protection

Our pumps feature 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.

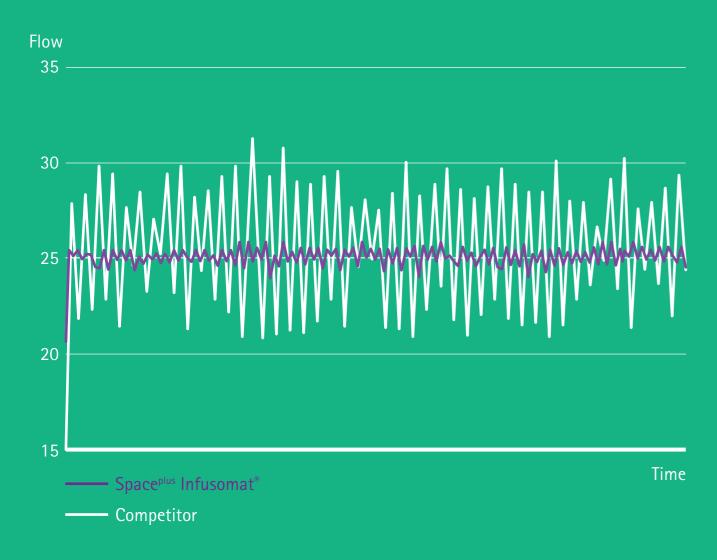


## Scalable modular system for flexibility in the clinical setting

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 localisation within the room. The innovative design supports routine tasks like cleaning and disinfection.

#### Flow accuracy at 25 ml/h



This graph shows 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.

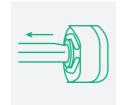
Spaceplus Perfusor® and Spaceplus
Infusomat® introduce new
dimensions of delivery rate
accuracy based on advanced
mechanical drive technology.



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 and highly accurate.

#### Infusomat® meets Perfusor®

The innovative drive technology not only enables outstanding startup and delivery performance, but also delivers safety and unique convenience when changing disposables - the risk of freeflow is minimised

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

# ☐H 16 mL in 46min SET TO ZERO Remifentanil BBRAUN 30 mcg / 1 mL 5.000 ng/ml SET TO ZERO

## Target controlled infusion (TCI) Algorithm-based TIVA

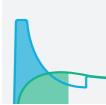
- Eleveld
- Schnider
- MarshMinto
- Gepts

#### A variety of algorithms

TCI models are available for various anaesthetic drugs. There are specific models for children, adults, bariatric patients etc.

#### Graphical TCI curve

Clinicians can easily visualise the status of the anaesthesia via on on-screen graphical display.



#### Information density

The touchscreen user interface displays the coloured graph and further TCI relevant data such as target concentration, drug name and remaining volume in the syringe.



#### Target Controlled Infusion with Infusion Pumps

Target Controlled Infusion (TCI) is a standardised infusion technique for the administration of opioids, propofol and other anaesthetic agents.

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).

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

#### Up to eight pumps

Customisable with up to 8 Space®plus Infusomat® or Perfusor®.





#### Tecla ME

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

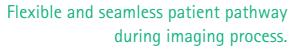
#### Deadman brake

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



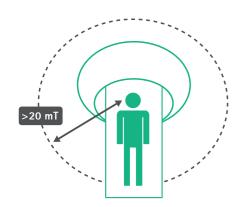
#### Large-sized alarm display

Infusion parameters as well as alarms always visible for caregivers during MR scan.



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 adversely 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**

#### SafeSet - AirStop

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



# 520 nm

#### Light Protected

Increased security through light-protected products, which supports the stability of light-sensitive medications.

#### **NRFIT®**

More safety in the area of regional anaesthesia to minimise risks of misconnections between neuraxial and intravenous application. Guidance by connector design and colour coding.



#### **ENFIT®**

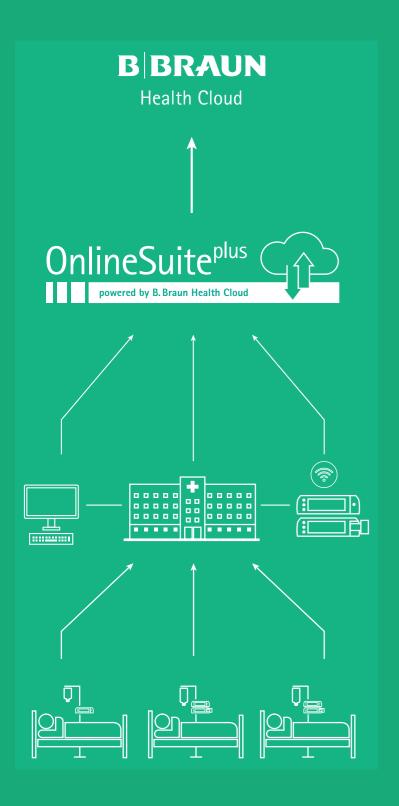


More safety in the area of enteral feeding to minimise risks of misconnections. Guidance by connector design and colour coding.

#### Dedicated Therapies, dedicated disposables.

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





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-learnings 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®plus infusion pumps are seamlessly connected to the hospital IT network thanks to the integrated WiFi module.

All infusion pumps may be used flexibily 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 bidirectional HL7-IHE framework for data communication.

#### Cyber Security

Communication through the hospital network between the Space®plus infusion pumps and the OnlineSuiteplus servers is encrypted.



#### Seamless Documentation



Space®plus infusion pumps introduce an internal data buffer for data caching when no network connection is available.

#### Connecting an ecosystem.

Space®plus in combination with OnlineSuiteplus 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 centralisation of the therapy

#### Lower alarm stress

Helps to reduce alarm fatigue for caregivers and patients.\*



#### Real-time monitoring



Live information about nature of alarm, location and priority to save time and effort.



The OneView<sup>plus</sup> application opens up new opportunities for health care professionals to design their workflows around infusion therapy: Thanks to OneView<sup>plus</sup>, you always have an overview of the clinical area.

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.





# Drug Library Compliance per unit (in %) 80 60 40

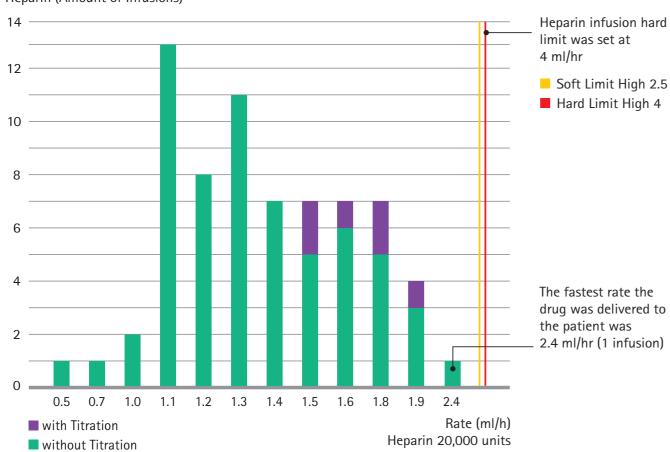
Nov-17 Dec-17 Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18

■ High-dependency units (e.g. intermediate care, general ward)

Intensive care area

0

#### 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 optimisation of the drug database.





#### Hard limit alert

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

#### Further reportings

The information generated can help identify optimisation 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 minimisation 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 optimise 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



#### AutoProgramming

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

#### Auto-Documentation

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



#### Buffering

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

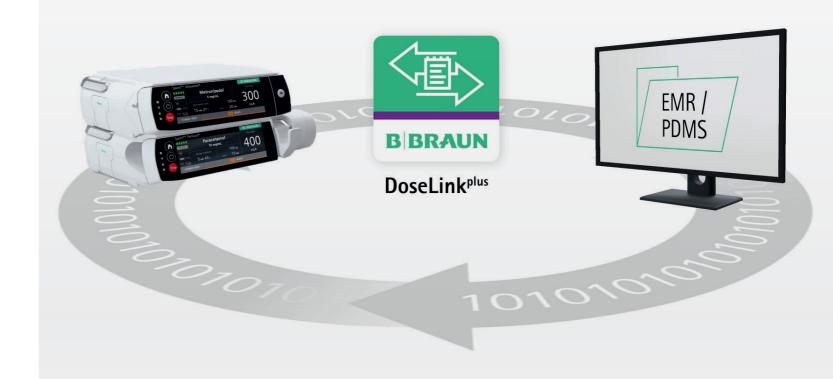


#### What is DoseLink<sup>plus</sup>?

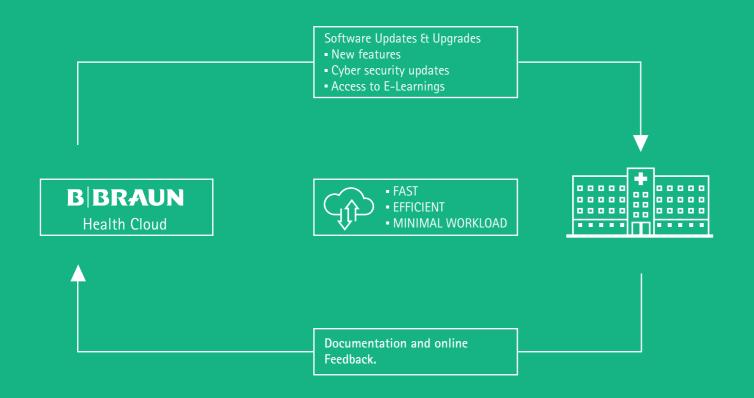
The DoseLink<sup>plus</sup> application enables Space<sup>®plus</sup> infusion devices to be integrated with a wide range of 3rd party systems such as Electronic Medical Record (EMR) systems, alarm management systems and asset management systems.

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





## Digital infusion pump updates



## Manual infusion pump updates



- New feature
- Cyber security fix
- Customer appointment
- Travel to customer
- Locate/collect device
- Perform update
- Distribute device
- Documentation on paper









1-2 per year

Manual Process for executing one SW-Update Cycle:

approx. 40 hours per care area

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.



## ₩₩ ₩₩

#### Always the latest software

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

#### Drug libraries on the fly

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



#### Driving Digitalisation. 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' centralised toolbox for managing infusion pumps across the entire hospital via its network.

