The whole hospital in the palm of your hand

B.Braun Space Infusion Systems
Space infusion pumps: Think new!

- One pump for all therapies
- Universal user interface
- Application throughout hospital

We offer the **flexibility** of a general pump with the **specialization** of a dedicated one
We pack a lot in so you get a lot out.

- Smallest and lightest pump system in the world
- Organized workplaces
- Ideal for interclinical and interhospital transport

We make things safe so you can have it easy.

- Simple, standardized handling
- Freeflow prevention
- Seamless IT integration

Find out more online: Either scan the 2D barcode with your smartphone or follow the link to find out more: www.space.bbraun.com
SpaceStation allows a fully flexible, modular setup of the infusion regime.

Quick and easy overview of infusion status through the centralized alarm management system, Space OneView.
Automated Infusion Systems

A fully equipped SpaceStation can be quickly and easily transported.

Set up a whole tower with only 1 power cord!

Space Cover Comfort displays visual and audible alarms centrally, allowing for quicker alarm localization.

Easy insertion and removal of pumps regardless of position.

Both the Infusomat® Space and the Perfusor® Space have the same design, interface and menu structure.

This means less training for your nurses and a reduced risk of incorrect handling.

Benefits

- Maintain the necessary flexibility even when space is limited
- Increase patient safety with integrated drug library and dose limits
- Universal user interface reduces training required and increases safety
- Simple transport
- Quicker alarm localization
Intensive Care – Space Glucose Control (SGC)

Simplify your Glucose Management

Three steps less complexity

- Reminder alarm when next blood sampling is required
- Consideration of nutrition data and automatic calculation of appropriate insulin rate
- Changes of nutrition results in new calculation of insulin rate

Three steps more safety

- Blood sampling and analysis
- Input of glucose value
- Confirmation of insulin rate
Space GlucoseControl is the first system to offer the benefits of intensive insulin therapy without increasing workload:
- Inbuilt algorithm calculates optimal insulin rate
- Both enteral and parenteral nutrition automatically included in calculation
- Learning software continually adapts to changes in insulin response and calculates optimal time until next glucose measurement

This decision support tool helps replace best guess decisions with precise calculations based on clinically proven software.

**Benefits**

1. Shorter length of stay with reduced complications
2. Decision support for necessary insulin dose and next glucose measurement
3. Proven prevention of Hyper- and Hypoglycemia
4. Automatic inclusion of nutrition values

Find out more online:
Either scan the 2D barcode with your smartphone or click on SGC on our webpage:
www.space.bbraun.com

More information:
Further information can be found in the brochure "In touch with the future: Space GlucoseControl" (6069010). Speak to your local sales rep or scan the 2D barcode with your smartphone.
Pediatrics and Neonatology

Because children are not small adults, this field of care has the challenge of requiring high flexibility without compromising on safety.

Space protects against medication error with easy to specify, ward specific hard and soft limits.

Soft limits:

Hard limits:
Prevention of incorrect insertion via pre-printed stripes

The Perfusor® Space is compatible with all syringe sizes from 2/3ml to 50/60ml. Choosing the right syringe for the indication ensures:
- Quick Startup
- Timely occlusion alarms

Benefits
- High precision application
- Bolus free insertion
- Automatic calculation of weight related rates
- Drug specific hard- and soft limits
- Parameter changes can be locked via Data Lock function

The Space platform offers the convenience of automatically calculated weight-related rates to ensure accuracy of infusion.
Operation Theater: TCI

Greater flexibility
- Space TCI possible with Infusomat®, reducing the number of syringe changes necessary
- Increased safety with DoseGuard® drug error reduction software
- Greater control enabled through the ability to change the drug concentration
- Enhanced user control with the possibility of delivering an extra bolus during TCI
- MRI compatible with no interference or degradation of image quality

Third Generation TCI

B. Braun’s Space system marks the introduction of 3rd generation TCI: simply use the nearest available Space pump as a temporary TCI pump.
**Predefined therapy schemes save staff time**
To select the right therapy, Space provides a variety of TCI algorithms (Propofol: Schnider, Marsh; Remifentanil: Minto) as well as user profiles (plasma targeting/effect site targeting).

**Anesthesia record keeping**
Space offers the possibility to not only standardize the equipment in anesthesia with that of the rest of the hospital but also automatically generate electronic anesthesia records.

**Benefits**

- Third generation TCI not linked to dedicated disposables or pumps
- No equipment bottlenecks
- Algorithm ensures a light, sufficient and consistent anesthesia
- Increased flexibility
- Choice of algorithms: Propofol: Schnider, Marsh; Remifentanil: Minto
Specialist Units

Specialized Therapies for Specialist Units

DataLock level 3 developed specifically for PCA.
- The text on the DataLock 3 can be customized to meet the requirements of pain services
- Prevents unauthorised change in parameters

Patient Controlled Analgesia (PCA)

- Freely programmable ramping phase to slowly incorporate nutrition into therapy and avoid intolerances
- Plateau for main phase of therapy
- Taper phase ensures slow and regular transition between IV enteral nutrition

Syringe protective cap prevents accidental or unauthorised removal of syringe.
Automated Infusion Systems

Ensure sufficient therapy: The A/D (attempts vs deliveries) ratio is automatically calculated.

Two-phase therapy allows definition of a standard rate and bolus rate. Ideal for infusion of antibiotics, cytostatics or tocolytic drugs.

Benefits

Therapy Profiles:

- Reduced nurse workload
- Higher standardization of therapy
- Reduced medication error

PCA:

- Fast pain relief without increasing nurse workload
- Therapy sufficiency always visible via A/D ratio
- Effectual protection against accidental or unauthorised overdose

Compatible with any Infusomat® Space or Perfusor® Space
Imaging Environment – Space Station MRI

Convnetional methods for infusion in the MR environment include use of extra long infusion lines or dedicated MR-pumps. Both of these are costly and require an interruption of running infusions.

**Standard infusion pumps for special applications**
The SpaceStation MRI closes this technology gap by letting doctors and staff work with standard Space infusion pumps in the MRI setting.

- Optimal pump positioning: an inbuilt magnetic field meter, the TeslaSpy®, ensures pumps are never brought too close to the MRI Magnet.
- Less need for re-scans: SpaceStation MRI shields the pumps against RF interference and thereby ensures interference-free images.
- No interruptions: Close positioning of pumps means standard infusion lines can be used and running infusion pumps can simply be inserted into the SpaceStation MRI.
The electromagnetic interference created by the pumps can negatively affect the image quality of the MRI images.

**With SpaceStation MRI**

**Without SpaceStation MRI**

**Cost Savings with SpaceStation MRI**

- No dedicated pumps needed: peristaltic MR-compatible pumps cost up to 20,000€
- Lower risk of MRI Breakdown: although unlikely, an MRI breakdown caused by ferromagnetic material entering magnet can cost as much as 50,000€
- Less costly rescans: a typical re-scan costs approximately 500€
- Quicker, effective patient transfer: expensive extra long infusion lines are not only a cost factor in themselves but waste nurse time to prepare.

**Benefits**

- Allows use of standard pumps in MRI environment
- Removes need for wasteful long infusion lines
- No interruption of running infusions
- Passive protection against scan interference

Find out more online:
Either scan the 2D barcode with your smartphone or click on MRI on our webpage
www.space.bbraun.com
Dedicated Disposables

The right disposable for the best result
Perfusor® Space pumps are essential where a precise and consistent infusion is necessary such as for inotropic drugs or in neonatal wards. The accuracy and consistency of an infusion, however, is not only dependant on the pump but is linked to the quality of the syringe. The interaction between a volumetric pump and the infusion line is just as subtle and an incorrect choice of line can lead to patient complications.

B. Braun therefore can only guarantee the accuracy and consistency of an infusion if high quality, dedicated disposables are used.

CytoSet Infusomat® Space
- Safe and simple infusion set tailored to cytostatic applications:
- Reduced toxic contamination
- Prevent drug incompatibilities
- Safe and simple priming process
- Perfect fit to Piggyback profile of Space infusion pumps

More information:
Further information can be found in the brochure “Disposables - the Original by B. Braun” (6068892).
Speak to your local sales rep or scan the 2D barcode with your smartphone.
Benefits

- Further increases the range of available therapies
- Simple implementation through high system compatibility
- Broad range of disposables specifically suited to Space Infusion Pumps

Original Perfusor® Syringe (OPS) and Omnifix®
- Excellent startup characteristics for regular flow
- Consistent drive characteristics reduce pressure false alarms
- Available in sizes 2-60ml

Nutrition lines
- Only universal pump which supports enteral nutrition
- Only SGC pump which includes nutrition in algorithm
- Inbuilt Ramp/Taper profiles reduce workload and increase reliability
Space OnlineSuite – the new Application Platform

OneView – Your benefits:
- Increased efficiency due to centralized IV therapy overview
- Immediate information in all rooms
- Pump alarm management support
- Reduces alarm stress for both nursing staff and patients
- Increased medication safety

DLM .USB / .WEB – Your benefits:
- Always up-to-date Drug Library
- Time saving for technicians
- No workflow disturbance
- Increased medication safety
Automated Infusion Systems

DoseTrac – Your benefits:
- Insights into potential medication errors
- Monitor practice and process improvements
- Optimized pharmacy management
- Documentation without gaps

Drug Library Manager – Your benefits:
- Central administration of therapy settings
- One DrugLibrary file for all pumps
- Easy set up of Care Unit specific DrugLists

Benefits
- One platform for several infusion management applications
- Easy to integrate into the hospital network
- Adaptable and extendable due to standardized technologies
- Future-proof

Find out more online:
Either scan the 2D barcode with your smartphone or click on Space OnlineSuite on our webpage:
www.space.bbraun.com

More information:
Further information can be found in the brochure “Space OnlineSuite” (6064500). Speak to your local sales rep or scan the 2D barcode with your smartphone.
# Technical Data

## Infusomat® Space, Volumetric infusion pump

<table>
<thead>
<tr>
<th>Type of unit</th>
<th>Volumetric infusion pump</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>214 x 68 x 124 mm (WxHxD)</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 1.4 kg</td>
</tr>
<tr>
<td>Moisture protection</td>
<td>IP 22, drip protected for horizontal usage</td>
</tr>
<tr>
<td>Display</td>
<td>Backlit graphic display, ~40° read angle from all sides</td>
</tr>
<tr>
<td>Keypad</td>
<td>Backlit keys, cell phone like cursor navigation</td>
</tr>
<tr>
<td>Flow Rates</td>
<td>0.1-1200 ml/h</td>
</tr>
<tr>
<td>Accuracy of set delivery rate</td>
<td>&lt;&lt; ±0.5 % mechanical accuracy</td>
</tr>
<tr>
<td></td>
<td>± 5 % according to IEC/EN 60601-2-24</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>+10° C ... + 40° C</td>
</tr>
<tr>
<td></td>
<td>+50° F .... +105° F</td>
</tr>
<tr>
<td>Voltage</td>
<td>11-16 V DC supplied by external Space Power Supply or by SpaceStation</td>
</tr>
<tr>
<td>Battery operating time</td>
<td>Minimal power consumption of the devices and new battery technology ensure long operating times, e.g. 9.4 hrs. @ 80 ml/h, 8.5 hrs. @ 100 ml/h</td>
</tr>
<tr>
<td>Lifetime</td>
<td>Min. 10 years under continuous duty conditions</td>
</tr>
<tr>
<td>Article-No</td>
<td>Infusomat® Space: 8713050 Infusomat® Space P: 8713070</td>
</tr>
</tbody>
</table>

## Perfusor® Space

<table>
<thead>
<tr>
<th>Type of unit</th>
<th>Infusion syringe pump, syringe driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>249 x 68 x 152 mm (WxHxD), drive parked</td>
</tr>
<tr>
<td>Weight</td>
<td>Approx. 1.4 kg</td>
</tr>
<tr>
<td>Moisture protection</td>
<td>IP 22, drip protected for horizontal usage</td>
</tr>
<tr>
<td>Display</td>
<td>Backlit graphic display, ~40° read angle from all sides</td>
</tr>
<tr>
<td>Keypad</td>
<td>Backlit keys, cell phone like cursor navigation</td>
</tr>
<tr>
<td>Flow Rates</td>
<td>0.01-1800 ml/h</td>
</tr>
<tr>
<td>Accuracy of set delivery rate</td>
<td>&lt;&lt; ± 0,5 % mechanical accuracy</td>
</tr>
<tr>
<td></td>
<td>± 2 % in compliance with IEC/EN 60601-2-24</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>+5° C ... + 40° C</td>
</tr>
<tr>
<td></td>
<td>+41° F .... +105° F</td>
</tr>
<tr>
<td>Voltage</td>
<td>11 - 16 V DC supplied by external Space Power Supply or by SpaceStation</td>
</tr>
<tr>
<td>Battery operating time</td>
<td>Minimal power consumption of the devices and new battery technology ensure long operating times, e.g. 16.8 hrs @ 1 ml/h, 16 hrs @ 5 ml/h, 14 hrs @ 20 ml/h</td>
</tr>
<tr>
<td>Lifetime</td>
<td>Min. 10 years under continuous duty conditions</td>
</tr>
<tr>
<td>Article-No</td>
<td>Perfusor® Space: 8713030</td>
</tr>
</tbody>
</table>
**Space SmartBattery Packs**

**Type of unit**
High capacity SmartBattery Pack for Infusomat® Space, Perfusor® Space, SpaceCom and SpaceCover Comfort

**Handling**
Simple tool-free replacement by opening the cover of the battery compartment

**Cells**
four 1.8 Ah NiMH cells

**Electronics**
Discreet processor / memory PCB that monitors and controls the charging / discharging cycle

**Status**
Visualization of the actual status as icon in the main screen (">10 %, ">50 %" or ">80 %" of the battery capacity) and as remaining time in hours and minutes

**Recharging time**
Approx. 3 hours for 80 % of the operation time  
Approx. 6 hours for 100 % of the capacity

**Mechanism to extend battery lifetime**
Processor PCB controls the temperature of the cells  
Embedded battery maintenance software

**Article-No**
<table>
<thead>
<tr>
<th>Battery Packs (SP)</th>
<th>with pin</th>
<th>without pin</th>
</tr>
</thead>
<tbody>
<tr>
<td>NiMH without Wireless:</td>
<td>8713180A</td>
<td>8713180</td>
</tr>
<tr>
<td>LiIon without Wireless:</td>
<td>8713181A</td>
<td>8713181</td>
</tr>
<tr>
<td>LiIon with Wireless:</td>
<td>8713182A</td>
<td>8713182</td>
</tr>
</tbody>
</table>

**Space Power Supply and Space PoleClamp**

**Type of unit**
High capacity SmartBattery Pack for Infusomat® Power Supply  
Space: Voltage supply for up to 3 Space pumps  
PoleClamp Space: Snap-in-Technique for fast fixation of stacks of up to 3 Space pumps

**Fixation**
PoleClamp can be attached to infusion poles and vertical tubes (diameter 16–40 mm) as well as horizontal wall rail systems accord. to EN1789

**Moisture protection**
Power Supply: protected from splash water, IP42

**Voltage**
100–240 V AC +/-10 % = 90–264 V AC, 50/60 Hz

**Adapters**
Euro, UK, USA, RSA, India, Korea, China, Australien

**Cable length**
2 m

**Accessories**
8713133 Combi Lead 12 V – to connect up to 3 Space pumps to one power supply; 8713135 Short infusion stand for Space PoleClamp

**Article-No**
<table>
<thead>
<tr>
<th>Space PoleClamp:</th>
<th>8713130</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combi Lead 12 V:</td>
<td>8713133</td>
</tr>
</tbody>
</table>

**Ambulance cars, helicopters and jets**

**Type**
12 V adapter cable to connect up to 3 Space pumps to the onboard supply system of ambulance cars, helicopters or jets

**Certificates for pumps incl. accessories**
EN 1789 Type B: Emergency Ambulance  
EN 1789 Type C: Mobile Intensive Care Unit  
EN 13718-1: Air, water and difficult terrain ambulance

**Power consumption**
max. 20 W for 3 pumps

**Accessories**
8713231 On-board 12 V supply

**Article-No**
On-board 12 V supply: 8713231
Technical Data

**SpaceStation, SpaceCover Standard, SpaceCover Comfort**

| Type of Device | Modular stackable rack (SpaceStation) for any combination of up to 4 Infusomat® Space or Perfusor® Space  
SpaceCover Standard as roof of the upper SpaceStation.  
SpaceCover comfort with central optical and acoustic operation status indicator. Central adjustable volume of the alarm signals. |
|---|---|
| Weights | SpaceCover Comfort: 0.9 kg  
SpaceCover Standard: 0.6 kg  
SpaceStation: 3.6 kg  
SpaceStation with SpaceCom: 4.1 kg |
| Expandability | Tool-free assembly of up to 6 Space Stations  
(6 x 4 slots) in one, two or three pillars |
| Fixation | Universal clamp can be attached to infusion poles (diameter 16-40 mm) as well as horizontal wall rail systes accord. to EN1789 |
| Moisture protection | IP22, drip protected for horizontal usage |
| Power supply system | Built-in AC adapter. Standard mains cord for non-heating apparatus, rubber connector  
Primary: 100-120 V AC ~ 50/60 Hz, 200-240 V AC ~ 50/60 Hz,  
110V 0.6 A/220 V 0.3 A; Secondary: 12V DC/35 W |
| Battery operating time | SpaceCoverComfort: ~ 26 hrs  
SpaceCom without WLAN: ~ 3 hrs @ one battery  
SpaceCom without WLAN: ~ 5 hrs @ two batteries  
SpaceCom with WLAN: ~ 2 hrs @ one battery  
SpaceCom with WLAN: ~ 3.5 hrs @ two batteries |
| Operating Temperature | +10° C … + 40° C  
+50° F .... +105° F |
| Article-No | SpaceCover Standard: 8713147  
SpaceCover Comfort: 8713145  
SpaceStation: 8713140  
SpaceStation incl. SpaceCom: 8713142  
SpaceCom Retrofitting kit: 8713160  
PoleClamp SPS: 34251151 |

**PCA**

<table>
<thead>
<tr>
<th>Space PCA kit</th>
<th>PCA kit for Infusomat® and Perfusor® Space</th>
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<tbody>
<tr>
<td>Article-No</td>
<td>8713554</td>
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<tr>
<td>Syringe anti removal cap</td>
<td>Protective cap to prevent syringe manipulation</td>
</tr>
<tr>
<td>Article-No</td>
<td>Anti removal cap: 8713556</td>
</tr>
</tbody>
</table>
Automated Infusion Systems

**SpaceStation MRI**

**Type of unit**
MR-conditional unit for taking up to four Space pumps incl. trolley

**Certificates**
Siemens MRI scanners:
- Trio (3 Tesla)
- Trio A Tim System (3 Tesla)
- Verio (3 Tesla)
- Espree (1.5 Tesla)
- Avanto (1.5 Tesla)
- Sonata (1.5 Tesla)
- Symphony (1.5 Tesla)
- ESSENZA (1.5 Tesla)

**Max. magnetic flux density**
20 mT = 200 G
Online vectorial measurement of the field components in three axes.

**Radio interference suppression**
IEC EN 60601-1-2:2001

**Voltage**
Primary: 100-120V AC / 200-240 VAC; max 80 VA
Inlet connector for non-heating apparatus; rubber connector

**Moisture protection**
IP21, protection against waterdrops

**Article-No**
SpaceStation MRI: 8713152

**Space OnlineSuite**

**Article-No**
Space OnlineSuite DVD: 876100
Space OnlineSuite DVD incl. license dongle: 876101

**Space GlucoseControl (SGC)**

**SpaceControl and SGC modul**
Decision support system for glucose therapy.
Consists of SpaceControl as user interface and the SGC module with the eMPC algorithm.

**Article-No**
SpaceControl: 8713090
SGC Module: 8713584

**Accessories**

<table>
<thead>
<tr>
<th>Article-No</th>
<th>Description</th>
<th>Article-No</th>
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<tbody>
<tr>
<td>8713210</td>
<td>Extension lead 60 cm</td>
<td></td>
</tr>
<tr>
<td>8713215</td>
<td>Extension lead 120 cm</td>
<td></td>
</tr>
<tr>
<td>8713315</td>
<td>Extension lead 10 m</td>
<td></td>
</tr>
<tr>
<td>8713415</td>
<td>Extension lead 15 m</td>
<td></td>
</tr>
<tr>
<td>8713180</td>
<td>Space SmartBattery Pack</td>
<td></td>
</tr>
</tbody>
</table>