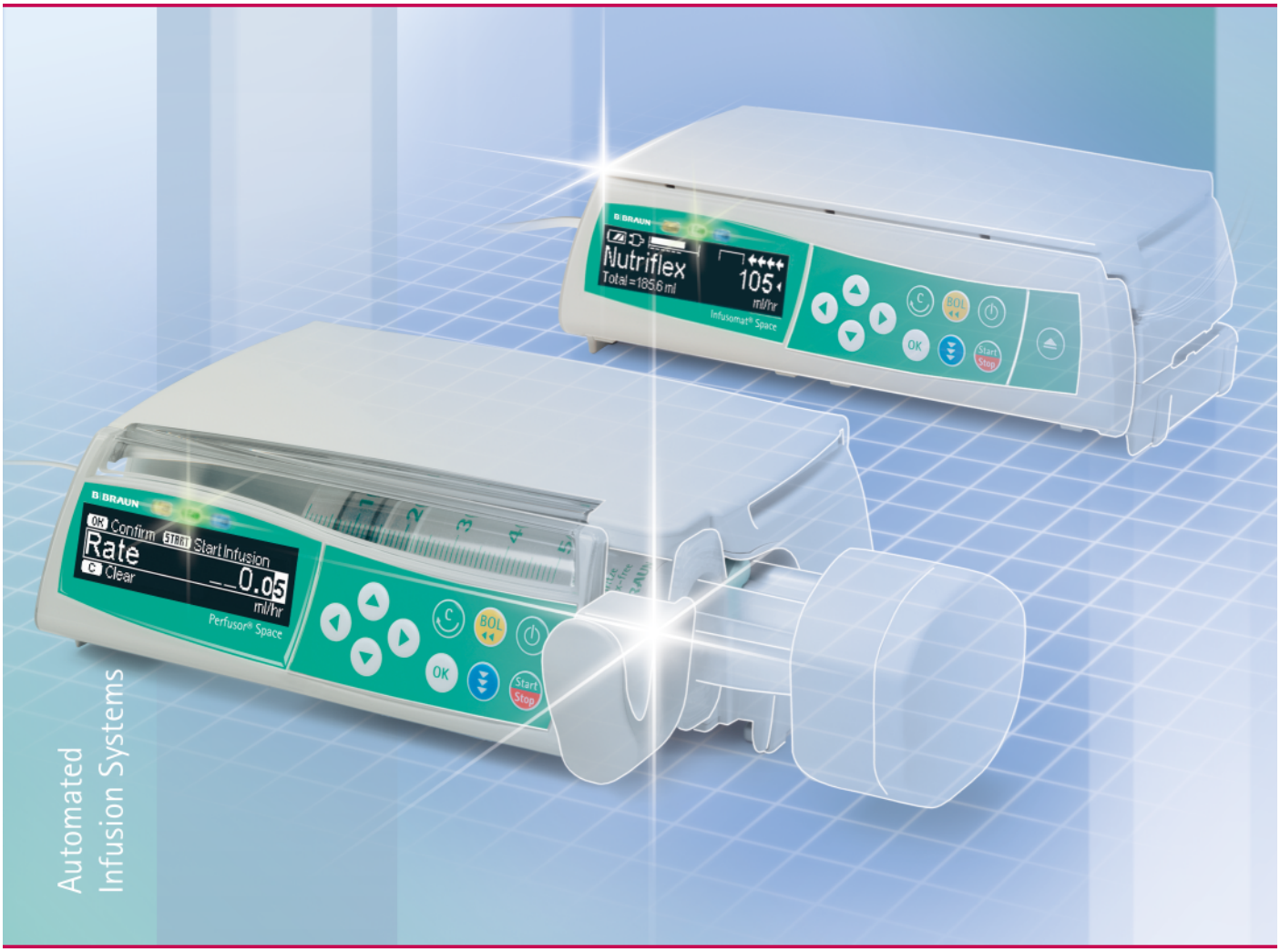
B. Braun Space

Discover its performance



Smaller. Simpler. Safer.
The New Standard.

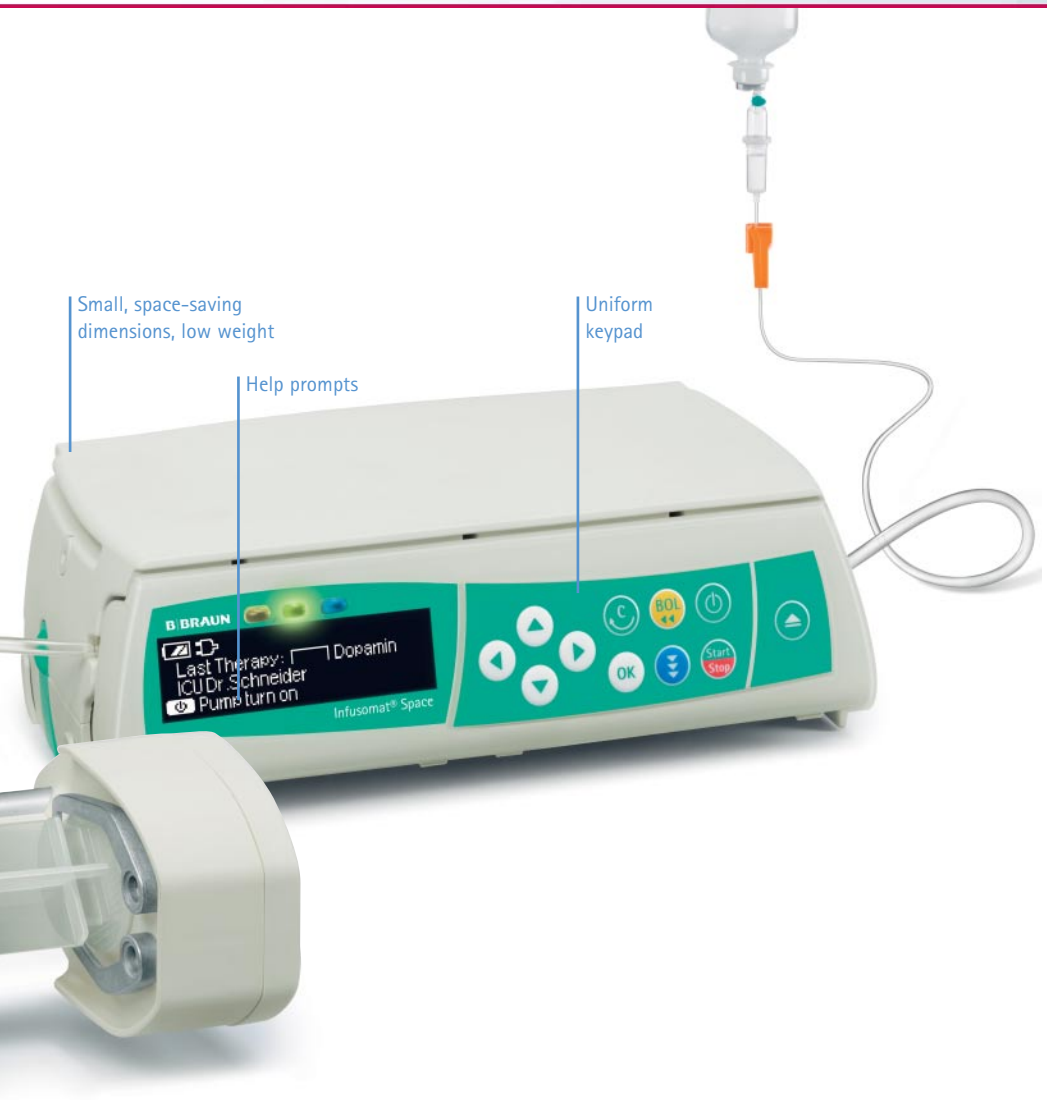
B BRAUN
SHARING EXPERTISE

Perfusor® Space & Infusomat® Space

Two pump types – one concept

Smaller, lighter and safer to handle than any previously comparable system. Perfusor® Space and Infusomat® Space are setting new standards in infusion technology.
The user interface for both pump types is identical. This uniformity lowers costs for medical and technical training, streamlines workflow and raises safety standards.

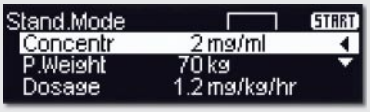
Perfusor® Space and Infusomat® Space offer universal solutions for a wide variety of therapeutic tasks, while raising standards for mobility and flexibility. For the first time, this allows the standardisation of infusion management systems across hospital and community settings. This efficient use of Investment promotes reduced costs for both business and administration.



Custom-configurable functions

Dose Calculation[1]

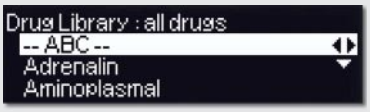
Automatically and accurately calculates delivery rates based on dosage guidelines, concentration, container size, and patient's body weight.



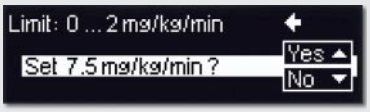
Enter variables for dose calculation

Drug Library[2]

Select medications and infusion therapies quickly and easily with the Drug Library feature. Every pump is equipped with a memory capacity that stores up to 720 different drugs along with key infusion parameters.



Select medication from the Drug Library



Drug-specific dosage limits prevent overdosing

Macro mode

Adapt the display screen as you like

Help prompts

Operating instructions display in brief

Alarm volume settings

Adjust the volume of the audible alarm to be heard above the ambient noise level

Data lock

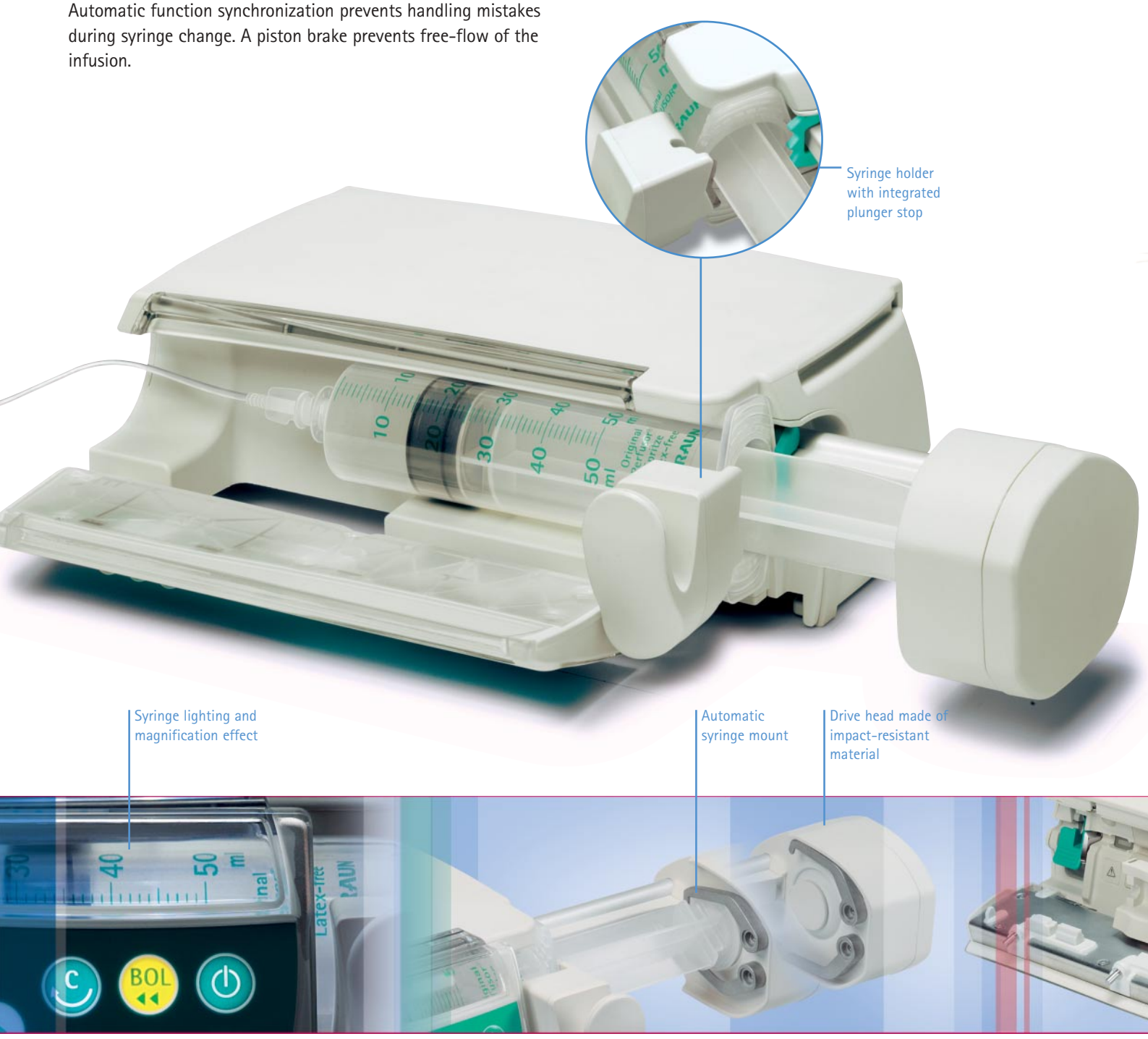
Protects against unauthorized tampering

[1] available in February 2005
[2] available in 2nd quarter 2005

Perfusor® Space & Infusomat® Space

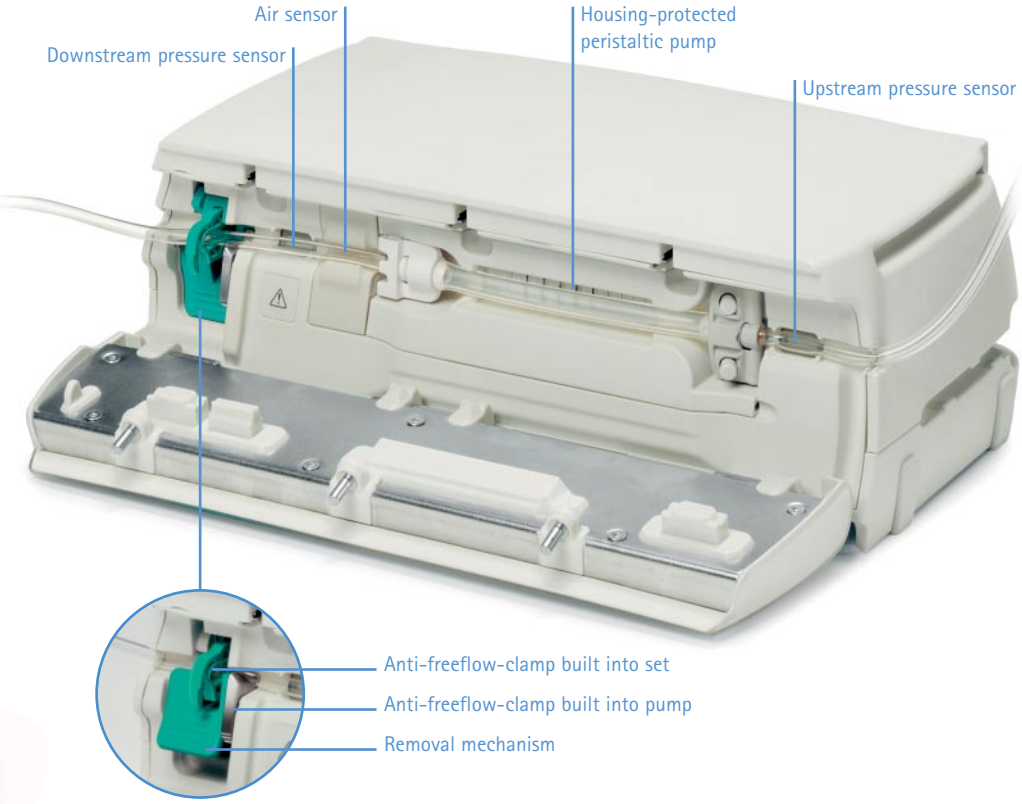
Perfusor® Space – changing syringes is now more convenient and safer than ever before

Perfusor® Space's innovative drive technology not only ensures excellent startup and delivery properties, but also delivers safety and unique convenience when changing syringes.
Automatic function synchronization prevents handling mistakes during syringe change. A piston brake prevents free-flow of the infusion.



Infusomat® Space – automatic freeflow protection when removing lines

The new Infusomat® Space features double the protection, with two anti-freeflow clamps. One within the pump and another directly on the Infusomat® Space Line. Freeflow is reliably prevented even if the roller clamp was not closed before removing the line.



Original Perfusor® Syringes

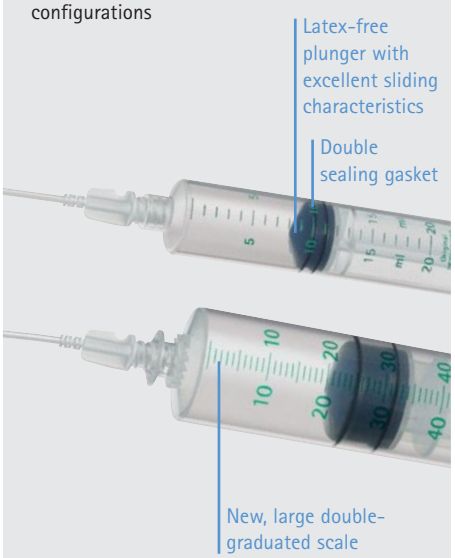
Sizes: 20 ml and 50 ml

Omnifix® Syringes

Sizes: 2/3, 5, 10, 20, 30, 50/60 ml

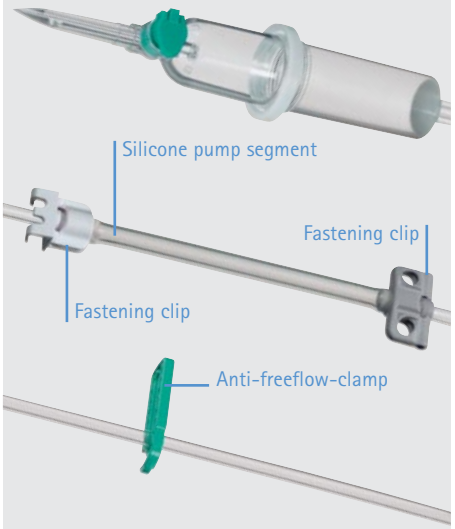
Original Perfusor® Lines

Supplied in various materials, lengths and configurations



Original-Infusomat® Space-Lines

In various designs



B. Braun SpaceControl

Operating convenience and safety

The B. Braun SpaceControl extends the functionality of infusion pumps to adapt them to a wider range of therapies. Touchscreen technology guides you comfortably to your therapeutic goal. The large, graphic user interface is straightforward and easy-to-understand, providing all the information needed to make reliable decisions.

Central control unit

When used with a SpaceStation the SpaceControl forms the central control panel. Allowing the management of each Space infusion device from a single interface. The touch of a button connects any Space workstation pump with SpaceControl.

For a versatile range of treatments

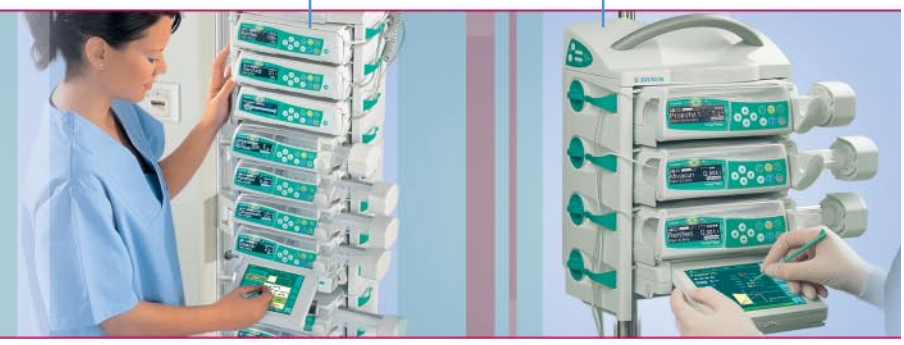
SpaceControl expands the range of uses for every infusion pump. With an extensive selection of therapy-specific infusion profiles, Perfusor® Space and Infusomat® Space conveniently solve the tasks encountered in hospital and homecare settings.

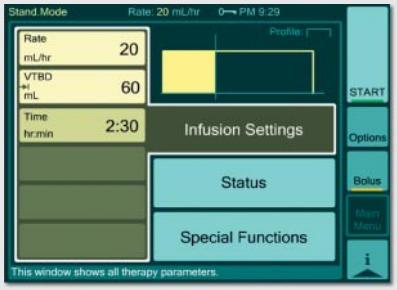
Barcoding

With the barcoding software integrated into every B. Braun Space pump, treatment and patient data can be quickly and reliably entered.

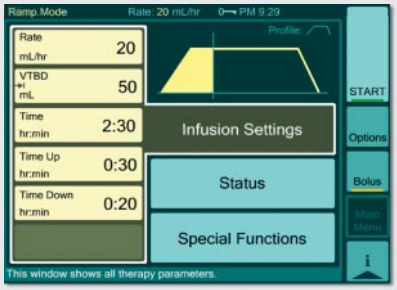
User-friendly central operations for intensive care

User-friendly central operations for anesthesia

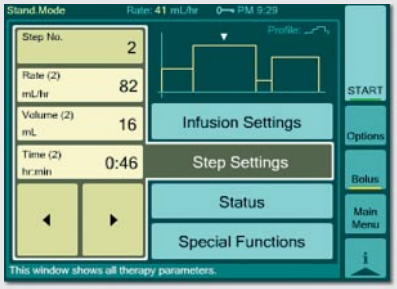




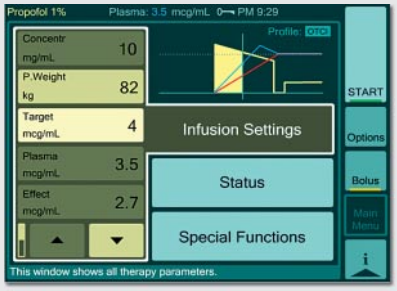
■ Standard mode, treatment selection



■ Ramp mode[2]



■ Profile mode[2]



■ PCA[2]

■ TCI/OTCI[2]

[2] available in 2nd quarter 2005

B. Braun SpaceStation & SpaceCover

Customised systems – all it takes is a click

SpaceStation allows flexible configuration of your workstations.

Up to four Space infusion pumps can be placed in one docking station, in any configuration. All it takes is a click to integrate them into the system. Removal is just as quick and easy. For complex therapies, up to six SpaceStations can be conveniently combined into one system. The power is always supplied to the system via a single cable.

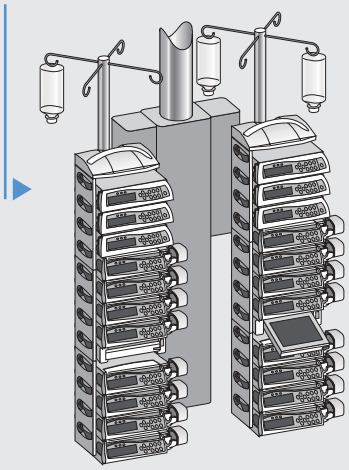
A SpaceCover with integrated carrying handle converts the B. Braun SpaceStation into a portable unit. The integrated visual and audible alarms of the SpaceCover Comfort centrally identify the status of the Space infusion devices, with alarm and pre-alarm conditions.

B. Braun Space workstations

No tools are needed to connect up to 6 SpaceStations quickly and easily to create a workstation for up to 24 infusion pumps. The system configuration can thus consist of up to 3 columns, with 1 SpaceCover over each pillar.

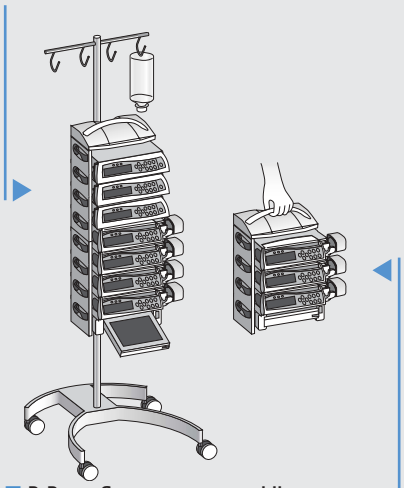
B. Braun Space intensive care, stationary

Adapted to ceiling supply units.
2×3 SpaceStations each connected to 1 pillar with SpaceCover for up to 24 infusion pumps.



B. Braun Space intensive care, mobile

2 SpaceStations connected with SpaceCover for up to 8 infusion pumps.



B. Braun Space surgery, mobile

1 SpaceStation with SpaceCover for 3 infusion pumps with SpaceControl.

B. Braun SpaceCom

State-of-the-art data communications

Optionally integrate a SpaceCom into a SpaceStation and facilitate modern information technology capabilities.

All conventional interfaces are available for linking B. Braun Space Systems to the hospital network or to an external CIS[3]. USB[4] memory sticks can be used for network-free data transfer and storage. The data can then be analyzed with EXCEL running on a normal PC.

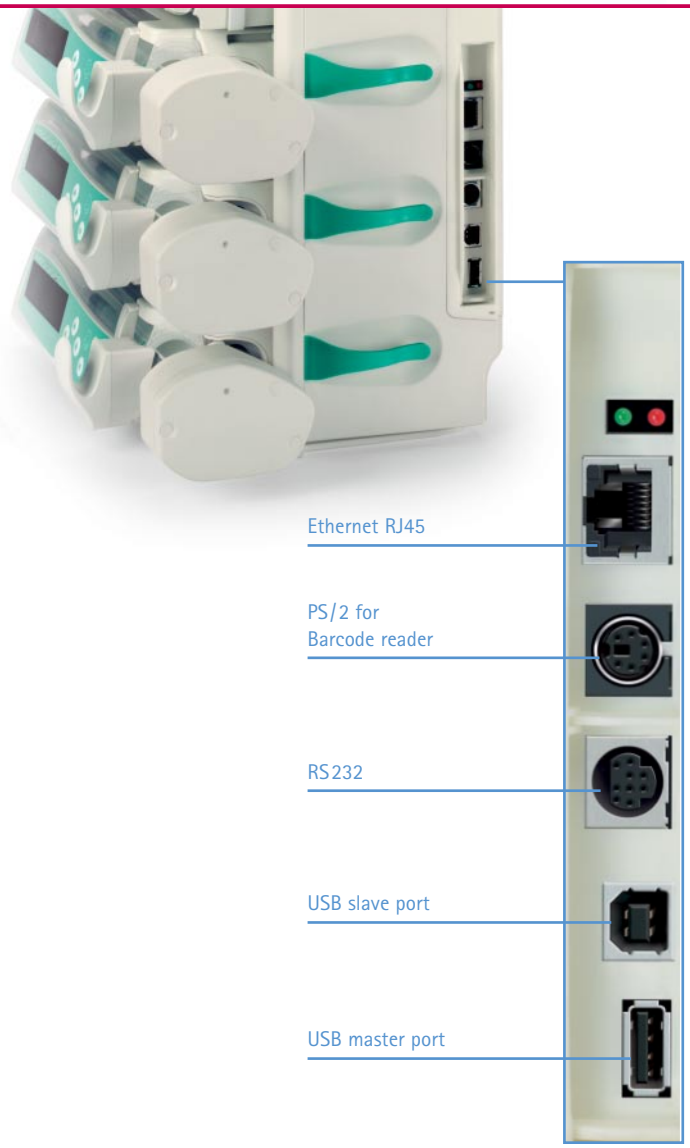
Low entry-level costs – web server applications

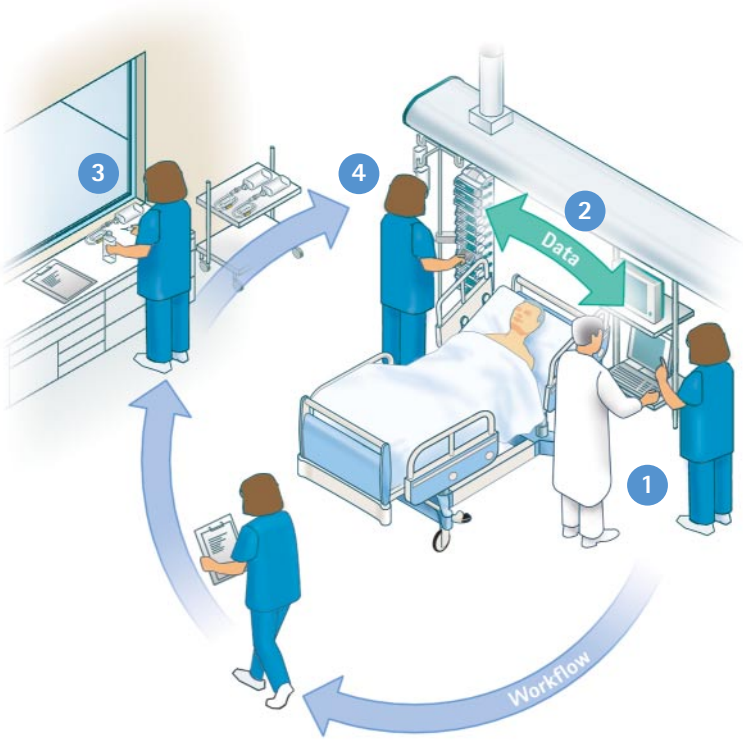
Investment in expensive hardware and software is reduced as integration into the hospital network is so easy, making SpaceCom an unbeatable platform for central data management. Use any standard Internet browser to access infusion data, medical histories or the servicing information of all Space workstations connected to the network. Infusion pump data are presented on configurable HTML pages.

Wireless mobility and no lost data

Wireless LAN[5], the communication technology of the future, is standard equipment on SpaceCom. This feature also makes online data connection, for example to the CIS, possible during transport throughout the hospital.

[3] Clinical Information System
[4] Universal Serial Bus
[5] Local Area Network

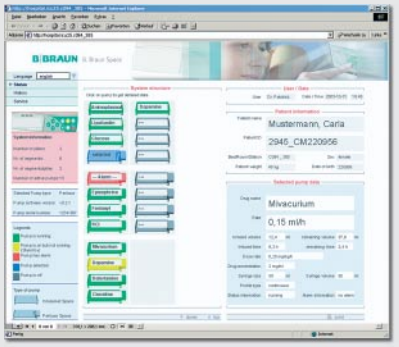




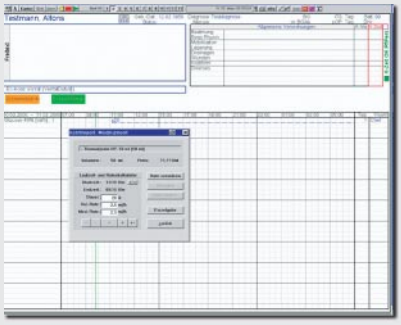
1. With CIS, prescriptions are planned and added to the CIS Drug Library.
2. The prescription is transferred to B. Braun Space.
3. The medication is prepared.
4. The prescription can be read on the system and allocated to the appropriate pumps, together with all the required data, such as dose rate, bolus and delivery rate limits.

Data entry using a barcode reader

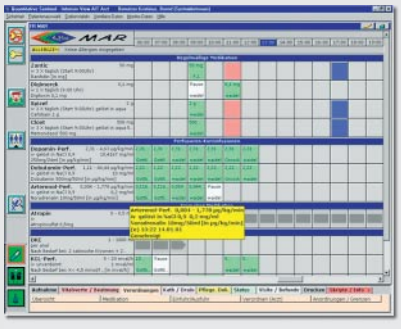
Intranet access with web server applications



■ Innovative web server application



■ Prescription CIS



■ CIS

Technical data

	Perfusor® Space	Infusomat® Space
Product specifications		
Type of device	Infusion syringe pump	Volumetric infusion pump
Classification	♥ defibrillation-proof, CF type, ☐ class II protection rating, in compliance with IEC/EN 60601-1 Class IIb in compliance with Council Directive 93/42/EEC	
Moisture protection	IP22 (drip protected for horizontal usage)	
EMC	IEC/EN 60601-1-2, IEC/EN 60601-2-24, EN 55011	
Operating conditions	+5 ... + 40 °C	+10 ... + 40 °C
	Relative humidity: 30% ... 90% (without condensation), atmospheric pressure: 500 ... 1060 mbar	
Size, weight	249x68x152 mm (WxHxD, drive parked), approx. 1.4 kg	214x68x124 mm (WxHxD), approx. 1.4 kg
Performance data		
Approved disposables	Syringe types: B. Braun Perfusor®/Omnifix®; B-D, Terumo, Monoject Sizes: 2/3, 5, 10, 20, 30, 50/60 ml	Original-Infusomat® Space-Line
Delivery rate range	0.01 - 999.9 ml/h	0.1 - 1200 ml/h
	0.01 - 99.99 ml/h in 0.01 ml/h increments 100.0 - 999.9 ml/h in 0.1 ml/h increments	0.1 - 99.99 ml/h in 0.01 ml/h increments 100.0 - 999.9 ml/h in 0.1 ml/h increments 1000 - 1200 ml/h in 1 ml/h increments
	Online rate modification without delivery interruption	
Accuracy of set delivery rate	± 2% in compliance with IEC/EN 60601-2-24	± 5% over 96 h with Original-Infusomat® Space-Line
Bolus delivery	Delivery rate 1 - 1800 ml/h	Delivery rate 1 - 1200 ml/h
	Max. bolus volume 99.99 ml - Bolus on demand - Bolus with volume/dose pre-selection - Bolus over time (1 min - 24 h)	
Volume pre-selection	0.1 - 9999 ml	
	0.1 - 99.99 ml in 0.01 ml increments 100.0 - 999.0 ml in 0.1 ml increments 1000 - 9999 ml in 1 ml increments	
Time pre-selection	1 min - 99 h 59 min	
Rate calculation	Automatic rate calculation by calculating volume over time or by dose	

	Perfusor® Space	Infusomat® Space
Performance data		
Dose calculation[1]	Automatic calculation of the delivery rate based on dose entries in mg, µg, IE or mmol, weight- and/or time-related (e.g. mg per kg/min; mg/kg/h; mg/kg/24h), bolus application in mg, µg, IE, mmol per kg and/or per time unit (min) with automatic calculation of the bolus rate for one bolus infusion	
KOR – Keep Open Rate[2]	Default settings: - Rate ≥ 10 ml/h: KOR Rate 3 ml/h - Rate < 10 ml/h: KOR Rate 1 ml/h - Rate < 1 ml/h: KOR Rate = set rate User-defined configuration or deactivation of KOR rates possible	
Standby (Pause) mode	Selectable by pressing one button (ON/OFF button short) Standby-time adjustable from 1 min up to 24 h in 1 min increments	
Drug Library[2]	Drug selection in startup menu or options - 720 drugs including all parameters in drug library - Up to 10 user-defined drug categories - Medication errors are prevented by drug-specific dose limits defined in the drug library	
Piggyback infusion[2]		Piggyback infusion mode for alternate application of two infusions - 2 different delivery rates can be entered - Dual infusion balancing - Switches between infusion 1 and 2
Infusion profiles/ therapy modes	Continuous mode, ramp/taper mode[2,6], PCA mode[2,6], freely programmable profile[6], TCI mode[2,6]	
Operator interface		
User interface	Standardized user interface for all infusion pumps in the Space Family	
Display	Backlit graphic display	
Keypad	Clearly structured, backlit keypad with 10 keys for fast and intuitive operation	Clearly structured, backlit keypad with 11 keys for fast and intuitive operation

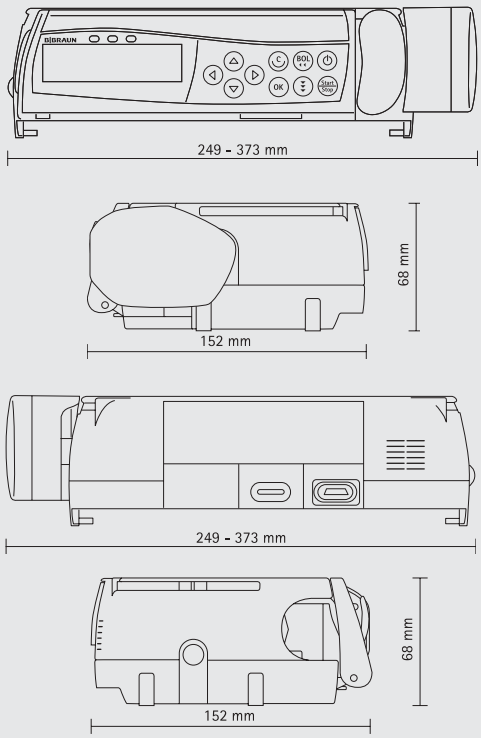
[1] available in February 2005
[2] available in 2nd quarter 2005
[6] programmable via B. Braun SpaceControl

Technical data

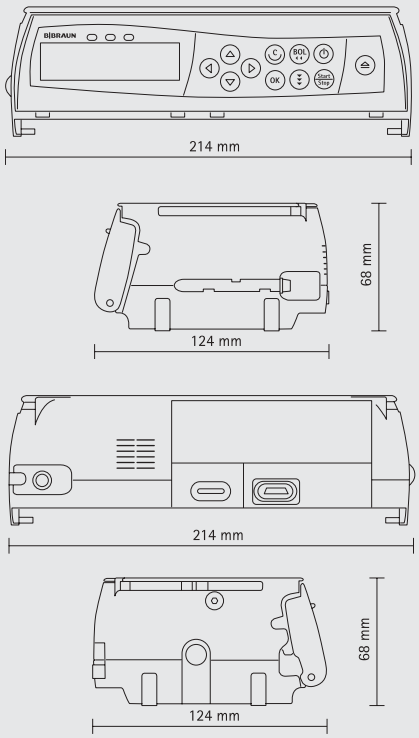
	Perfusor® Space	Infusomat® Space
Safety system		
Freeflow-protection	Integrated piston brake to prevent freeflow during syringe change	Device- and set-based anti-freeflow clamp for maximum security when pump door is opened or infusion line removed
Occlusion alarm	9 occlusion pressure levels selectable (approx. 0.1 – 1.2 bar)	
Bolus reduction	Automatic bolus reduction triggered by occlusion alarm	
Upstream pressure detection		Upstream pressure sensor detects closed roller clamp when used without drop sensor
Drop control		Operation selectable with or without drip sensor
Data lock	Data lock on 2 safety levels (parameters and disposables lockable)	
Alarm indicators	Optical alarm signal with clear text in display and LED Double-channel audible alarm system for maximum security Audible alarm for selected drug	
Alarms	Syringe empty, reminder alarm, pressure too high, battery empty, standby, syringe holder open, syringe not fixed properly, technical alarm, etc.	Occlusion pressure alarm, upstream alarm, drop alarm, air alarm, KOR alarm, reminder alarm, battery empty alarm, infusion line not or incorrectly inserted alarm, technical alarm, etc.
Pre-alarms	Pre-alarm when syringe almost empty, 3 min before preset target (VTBI/time) near-end, battery nearly empty	Pre-alarms for preselected volume and preselected time shortly before target (VTBI/time) near end, battery pre-alarm
Power supply		
Mains power supply	Power supplied by the B. Braun SpaceStation or an optional AC adaptor (rated voltage 100 ... 240 V AC~, 50/60 Hz) for stand-alone operation	
External low voltage	11 ... 16 V DC⎓; supplied by external power supply 12 V, or by SpaceStation, with connecting lead 12 V	
Battery type	Rechargeable NiMH battery pack, quick and easy exchange without opening device	
Battery operating time	Approx. 8 h at 25 ml/h with 50 ml syringe	Approx. 4 h at 100 ml/h
	When prompted, display shows battery status in h and min	
Battery recharging	Internal battery charger recharges the battery when the pump is connected to external low voltage; recharging time approx. 6 h (external battery charger optionally available)	

	Perfusor® Space	Infusomat® Space
History and interfaces		
History[2]	The last 1000 events can be stored in real-time memory	
Interface type	CAN-bus for connection to B. Braun SpaceStation with SpaceCom, B. Braun SpaceControl, PC with USB interface via interface lead SP	
Staff call	Connection lead staff call systems (max. 24V/0,5A/24VA; according to VDE 0834)	
System configuration and update		
Customizing	User-specific configuration of startup sequence and available menu items via PC program	
Software updates	Via USB interface (without opening device) or centrally[2] in connection with B. Braun SpaceStation	
Warranty, Technical Safety Check (TSC)		
Warranty	2 years	
TSC interval	2 years	

Scale 1:4



Scale 1:4



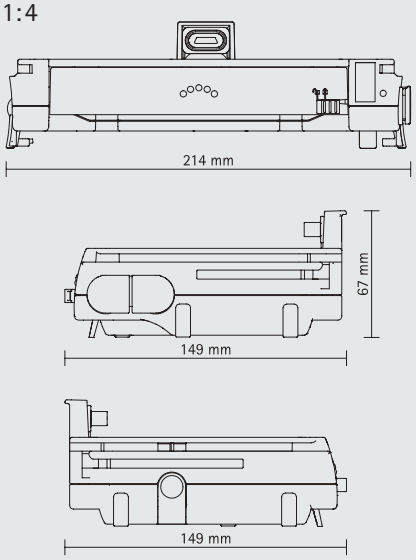
[2] available in 2nd quarter 2005

Technical data

B. Braun SpaceControl

Type of device	Control unit for infusion pumps
Classification	defibrillation-proof, CF type, class II protection rating, in compliance with IEC/EN 60601-1, Class IIb in compliance with Council Directive 93/42/EEC
Moisture protection	IP22
Interfaces	CAN-Bus interface for pump communication, PS/2 port for optional barcode reader
Power supply	11 ... 16V DC⎓ (supplied by physically connected pump)
Size, weight	214x67x149 mm (WxHxD), 0.85 kg
Display	5.7" LCD touchscreen display with VGA graphic card
Warranty	2 years
TSC interval	2 years

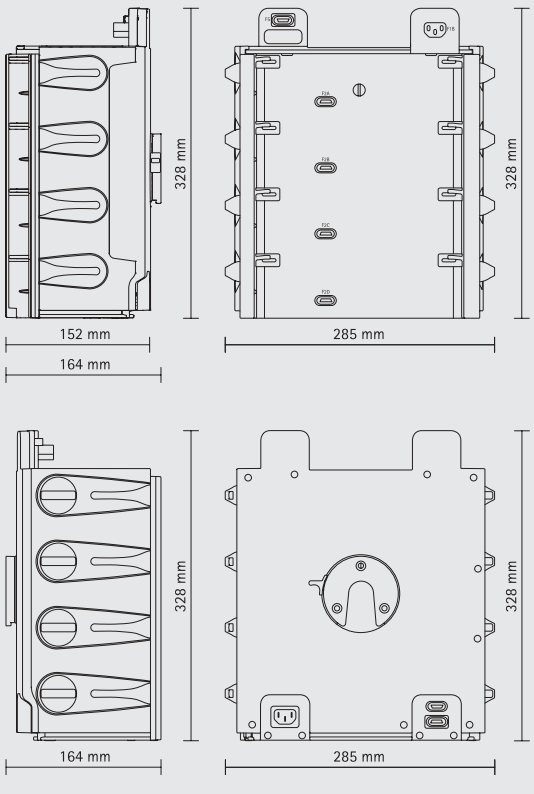
Scale 1:4



B. Braun SpaceStation

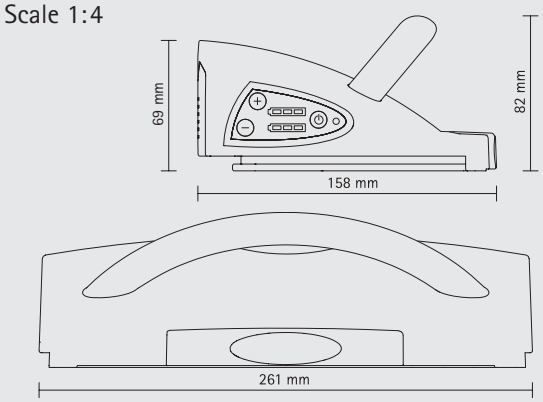
Type of device	Rack for infusion pumps and control devices
Classification	defibrillation-proof, CF type, class I protection rating, in compliance with IEC/EN 60601-1, Class IIb in compliance with Council Directive 93/42/EEC
Moisture protection	IP22
Power supply	Built-in AC adapter. Primary: 100 ... 120V AC~ 50/60 Hz, 200 ... 240V AC~ 50/60 Hz, 110V 0.6 A/220V 0.3 A; Secondary: 12V DC⎓/35 W
External low voltage	11 ... 16V DC⎓ (via connecting lead 12V)
Pump integration	4 sockets for connecting Perfusor® Space, Infusomat® Space and B. Braun SpaceControl
Connections for peripherals	Staff call system, PCA button, connecting lead 12V
Size, weight	285x328x164 mm (WxHxD), 3.1 kg (without SpaceCover, without stand clamp) 3.4 kg (without SpaceCover, with stand clamp)
Warranty	2 years
TSC interval	2 years

Scale 1:8

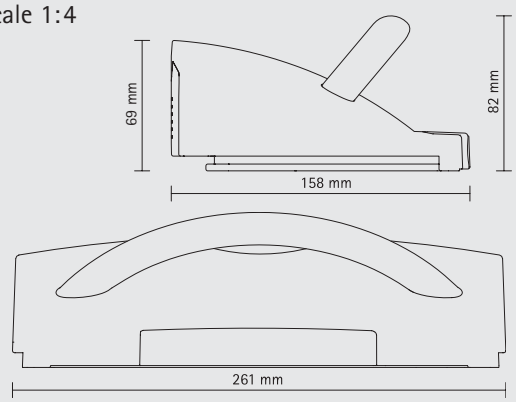


	B. Braun SpaceCover Comfort	B. Braun SpaceCover Standard
Type of device	System cover with additional functions	System cover
Loud speaker	Signals central audible alarm	
LED fields	Display central optical status	
Display and control unit	- Display SpaceCover battery status - Display SpaceCom battery status - Display battery operation/mains power operation - On/off switch on system during battery operation - Battery care	
Optional battery	Battery type: rechargeable NiMH (4x1.2V/2.0 Ah) Operating time: approx. 1 h with SpaceCom, approx. 10 h without SpaceCom Charging time: approx. 6 h	
Size, weight	261x82x158 mm (WxHxD), 0.85 kg	261x82x158 mm (WxHxD), 0.6 kg
Warranty	2 years	
TSC interval	2 years	

Scale 1:4



Scale 1:4



	B. Braun SpaceCom
Type of device	Data communication interface
Mounting	Invisibly integrated in the B. Braun SpaceStation
Interfaces	Ethernet, RS 232, USB master/slave, Wireless LAN, PS/2
Weight	0.3 kg
Warranty	2 years
TSC interval	2 years

Ordering data

Main components	Brief description	Code No. (REF)
Perfusor® Space	Syringe pump for intravenous and intra-arterial infusions and enteral nutrition. Equipment supplied: 1 Perfusor® Space, 1 rechargeable battery, 1 Instruction for use.	8713030
Infusomat® Space	Volumetric pump for Infusomat® Space line. For intravenous and intra-arterial infusions and for enteral nutrition. Equipment supplied: 1 Infusomat® Space, 1 rechargeable battery, 1 Instruction for use.	8713050
B. Braun SpaceControl[2]	Extended-function user interface and extended performance for Perfusor® Space and Infusomat® Space. Can be used as a programming station for one pump and/or as a central user interface for pumps connected to one system.	8713090
B. Braun SpaceStation	Station for up to 4 pumps.	8713140
B. Braun SpaceCover Comfort	Cover for the uppermost SpaceStation. With built-in handle and central alarm management and alarm LEDs. Required for use with B. Braun SpaceCom.	8713145
B. Braun SpaceCover Standard	Cover for the uppermost SpaceStation, with built-in carrying handle.	8713147
B. Braun SpaceCom[2]	Data communication interface can be optionally integrated into a SpaceStation. Allows data communication protocols for up to 24 pumps. Interfaces: Ethernet, RS 232, USB master/slave, wireless LAN, PS/2 for barcode scanner.	8713160

[2] available in 2nd quarter 2005

Accessories	Brief description	Code No. (REF)
Power Supply SP	Power supply for 1 pump when stand-alone operation is required.	
	Euro plug	8713110
	UK plug	8713111
	US plug	8713112
	Australian plug	8713113
	Universal plug	8713114
Pole Clamp SP	Universal clamp with built-in handle for transporting up to 3 pumps. Rotating assembly for vertical and horizontal mounting of pump on infusion stands and wall railing systems.	8713130
Short Stand SP	Short infusion stand for Infusomat® Space	8713135
Charger SP[2]	External battery charger with intelligent charging switch for charging 2 battery-packs.	8713170
Battery-Pack SP (NiMH)	Rechargeable battery for Infusomat®/Perfusor® Space, SpaceCover Comfort and SpaceStation.	8713180
Drop Sensor SP	Optional drop sensor for Infusomat® Space.	8713175
PCA Button SP[2]	Demand button for patient-controlled analgesia, can be connected to Infusomat®/Perfusor® Space.	8713190
Extension Lead SP (60 cm)	Cable for connecting SpaceStations when stacked in columns next to each other. Length: 60 cm.	8713210
Extension Lead SP (120 cm)	For connecting SpaceStations when stacked in columns next to each other. Length: 120 cm.	8713215
Interface Lead CAN SP	Interface cable for connection with PC.	8713230
Connecting Lead SP (12V)	For connecting to 12V port.	8713231
Combi Lead SP (12V)	For connecting up to 3 pumps (12V port).	8713133
Connecting Lead for Staff Call SP	For connecting to staff call system.	8713232
Barcode Reader SP[2]	Barcode reader for Code 128.	8713240
Barcode Image Reader SP[2]	Barcode image reader for PDF 417.	8713241

[2] available in 2nd quarter 2005

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SHARING EXPERTISE

B. Braun Melsungen AG

P.O. Box 1120
D-34209 Melsungen
Tel +49 (0) 56 61 71-0

www.bbraun.com
www.space.bbraun.com

We reserve the right to make changes to the data and shall not be liable for any errors contained herein.

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