



# The flexibility of infusion therapy beyond the hospital

Integrated care catalogue



# Adapting treatments, not lifestyles

At BD, we see the patient beyond the process. We strive to inspire confidence through our simple and flexible integrated care solutions, to provide comfort and certainty to all and better patient outcomes - beyond the hospital.

We invite you to navigate through this catalogue to discover the full breadth of our offerings for all your integrated care needs in the following therapy areas: Total Parenteral Nutrition (TPN), Antibiotic Therapy, Immunoglobulin Therapy and Palliative Care.



# Which infusion therapy do you need?

Click on the chapter headings to discover more



Total parenteral nutrition

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 Total parenteral nutrition (TPN)

 Intermittent

 25 doses

 Continuous

# Total parenteral nutrition

Malnutrition is a major clinical condition that can arise from various causes including gastrointestinal dysfunctions, surgery or cancer. Patients with wide ranging medical conditions rely on the use of total parenteral nutrition (TPN). However, TPN infusion pumps can sometimes compromise the patient's quality of life by giving them less independence or mobility.

BD's comprehensive TPN solution can provide a minimal impact to your patient's lifestyle while helping improve safety and flexible expectations

## What you need to start your TPN infusion



Ref. 999-603

### The BD BodyGuard™ Infusion System

1. The BD BodyGuard™ infusion pump
2. Power cord or battery charging cable
3. Rechargeable battery pack 1800mAH (inside the pump)
4. Directions for Use (in print out format)



Total parenteral nutrition (TPN)

## BD Bodyguard™ Microset - Infusion sets range

Reference	Image	In-line filter	Tubing length (cm)	Tubing inner diameter (mm)	Priming volume (ml)	Additional features
TPN00001		1.2µm	300	1.6	10	Roller Clamp
TPN00003		1.2µm	320	1.6	10	Slide Clamp
TPN00004		1.2µm	300	1.6	8	Light Resistant
TPN00005		1.2µm	330	1.6	8	Slide clamp
120-112XSFK		1.2µm	280	1.6	10	Slide Clamp
120-112XSFKV		1.2µm	250	1.6	7	Manual Priming Valve
120-112XPEFKY		1.2µm	300	1.6	8	1 Y-site
120-124XSFK		1.2µm	310	1.6	8	1 Y-site

## Accessories



Carry case, infusion kit  
Ref. CASE0002



Trolley with wheels  
Ref. CNC00001



Bag, 3 litre  
Ref. BAG00008



BAG, 2 litre  
Ref. 160-002XG  
Ref. 160-002XB  
Ref. 160-002XP  
(grey, black and pink)



500ml carrying bag  
Ref. 150-001X



Wall charger  
Ref. 999-WC



Rechargeable battery  
Ref. 130-050XV

## Our solution is perfectly suited to TPN

From the sets, to the pumps, to the accessories – all the way to the services, our TPN solution provides patient comfort, confidence and helps improve safety:

- The BD BodyGuard™ infusion pumps and pump sets connect to all types of infusion bags, reducing the setup time of infusion
- The BD BodyGuard™ pump offers programmable mode options that include ramp-up/ramp-down and continuous infusion modes
- We provide a wide range of accessories specific to both adult and paediatric TPN use
- We offer a range of sets that are specifically created for TPN administration, with an in-line 1.2 micron filter. All the sets have an anti-syphon valve that protects against free flow

### Patient comfort

The BD BodyGuard™ pump with its small, compact and lightweight size can help your patients achieve their desired independence.

The intuitiveness of its design helps reduce patient/nurse training through:

- Large colour screen with on-screen guided messages
- Easy programmability in a few steps
- Delayed start functionality
- Last program stored functionality

### Patient safety

Designed to help improve patient safety, the BD BodyGuard™ infusion pump can be configured for a variety of adult and paediatric therapy protocols.

The complete solution provides advanced safety features:

- 3 level access codes – to help prevent unauthorised programme changes
- Extensive drug library and fully configurable drug limits
- Audible alarms – including air occlusions, upstream/downstream and end of infusion
- Sets with built-in filters and one with a manual priming valve
- Free flow and back flow prevention
- Onscreen pressure bar graph

### Patient confidence

We have strived to make sure that our solution always meets our patient needs. In doing so, we have successfully met ESPEN guidelines<sup>2</sup>

The BodyGuard™ pump's long battery life on a single charge can give your patients the confidence and freedom they need to carry out their day to day activities

Our range of supporting accessories promote mobility as well as discretion

**To order or learn more about how BD can assist you in your efforts to bring this valuable therapy to more patients, contact your local BD sales representative.**



 Total parenteral nutrition (TPN)

 Intermittent

 25 doses

 Continuous

# IV antibiotic therapy

Discharging patients from the hospital to finish long antibiotic treatments at home is a practice that not only saves costs for the institution, but also allows the patient to regain a sense of freedom. IV antibiotics gain faster access to the blood by bypassing the gastrointestinal tract. They are often clinically perceived as being the most effective way to quickly administer treatments for infections in the lungs, bones and brain or to treat patients with chronic conditions such as cystic fibrosis.

The BD IV antibiotic solution can help your patient stay safe while maintaining some mobility.

## What you need to start your IV antibiotic treatment



Ref. 999-603

### The BD BodyGuard™ (in intermittent mode)

1. The BD BodyGuard™ infusion pump in intermittent mode
2. Power cord or battery charging cable
3. Rechargeable battery pack 1800mAH (inside the pump)
4. Directions for Use (in print out format)



## BD BodyGuard™ MicroSet - Infusion sets range

Reference	Image	Tubing length (cm)	Tubing inner diameter (mm)	Priming volume (ml)	Additional features
GEN00001		230	1.6	4	Slide Clamp
GEN00002		240	1.6	5	1 Needle-free 1 Slide Clamp
GEN00004		240	1.6	5	1 Needle-free Roller and Slide Clamp
GEN00014		230	1.6	4	Slide Clamp
120-124XSK		300	1.6	12	1 Needle-free 1 Slide Clamp

## Accessories



500ml carrying bag  
Ref. 150-001X



Wall charger  
Ref. 999-WC



Rechargeable battery  
Ref. 130-050XV

## Our solution is perfectly suited to IV antibiotic therapy

From the sets, to the pumps, to the accessories – all the way to the services, our IV antibiotic solution provides patient comfort, confidence and helps improve safety. The BD BodyGuard™ infusion pump can be used for a wide range of medication protocols. For IV antibiotic therapies, the intermittent infusion program on the BD BodyGuard™ is a special one which enables dose delivery at set intervals.

### Patient comfort

The BD BodyGuard™ pump with its small, compact and lightweight size helps your patients achieve their desired independence

The intuitiveness of its design helps reduce patient/nurse training through:

- Large color screen and on-screen guided messages
- Easy programmability in a few steps
- Delayed start functionality
- Last program stored functionality
- Priming via the pump

### Patient safety

Designed to help improve patient safety, the BD BodyGuard™ infusion pump can be configured for a variety of adult and paediatric therapy protocols including antibiotic therapy, pain management, chemotherapy and immunoglobulin treatments

The complete solution provides advanced safety features:

- 3 level access codes – to help prevent unauthorized programme changes
- Extensive drug library and fully configurable drug limits
- Audible alarms – including air occlusions, upstream/downstream and end of infusion
- Extensive range of infusion sets. Available with in-line filters (1.2 or 0.2 micron) if needed
- Free flow and back flow prevention
- On-screen pressure bar graph

### Patient confidence

- The BodyGuard™ pump's long battery life on a single charge can give your patients the confidence and freedom they need to carry out their day to day activities
- Our range of supporting accessories promote mobility as well as discretion

**To order or learn more about how BD can assist in your efforts to bring this valuable therapy to more patients, contact your local BD sales representative.**



↑  Total parenteral nutrition (TPN)

↑  Intermittent

↑  25 doses

↑  Continuous

# Immunoglobulin therapy

Immunoglobulin therapy is a life saving treatment given to patients with impaired immune systems.<sup>3</sup> Immunoglobulin is a blood product used to treat both primary immunodeficiencies (such as genetic or hereditary immune deficiency disorders) or secondary immunodeficiencies (due to chemotherapy damage, HIV or malnutrition).

BD offers a broad solution to help satisfy your IV immunoglobulin therapy needs.

Our offering enables your patients to receive accurate and reliable treatment, while maintaining a sense of normalcy and freedom.

# Immunoglobulin - intravenous

## What you need to start your immunoglobulin IV therapy

The 25 doses mode permits you to program up to 25 different steps, where each step has its own rate and volume. The protocol steps will ultimately be delivered sequentially until all steps are completed.



Ref. 999-603

### The BD BodyGuard™ (in 25 doses Mode)

1. The BD BodyGuard™ infusion pump in 25 doses mode
2. Power cord or battery charging cable
3. Rechargeable battery pack 1800mAH (inside pump)
4. Directions for Use (in print out format)



## BD BodyGuard™ MicroSet - Infusion sets range

Reference	Image	Tubing length (cm)	Tubing inner diameter (mm)	Priming volume (ml)	Additional features
GEN00001		230	1.6	4	Slide Clamp
GEN00002		240	1.6	5	1 Needle-free 1 Slide Clamp
GEN00014		230	1.6	4	Slide Clamp
120-124XSK		240	1.6	16	1 Needle-free 1 Slide Clamp

## Accessories



500ml carrying bag  
Ref. 150-001X



Wall charger  
Ref. 999-WC



Rechargeable battery  
Ref. 130-050XV

## Our solution is perfectly suited to intravenous immunoglobulin therapy

From the sets, to the pumps to the accessories - all the way to the services, our IV immunoglobulin solution provides patient comfort, confidence and helps improve safety. The BD BodyGuard™ infusion pump can be used for a wide range of medication protocols. For IV Immunoglobulin therapies, the 25 steps infusion program on the BD BodyGuard™ is best suited.

### Patient comfort

The BD BodyGuard™ pump with its small, compact and lightweight size helps your patients achieve their desired independence

The intuitiveness of its design helps reduce patient/nurse training through:

- Large color screen and on-screen guided messages
- Easy programmability in a few steps
- Delayed start functionality
- Last program stored functionality
- Priming via the pump

### Patient safety

Designed to help improve patient safety, the BD BodyGuard™ infusion pump can be configured for a variety of adult and paediatric therapy protocols including antibiotic therapy, pain management, chemotherapy and immunoglobulin treatments

The complete solution provides advanced safety features:

- 3 level access codes – to help prevent unauthorized programme changes
- Extensive drug library and fully configurable drug limits
- Audible alarms – including air occlusions, upstream/downstream and end of infusion
- Extensive range of infusion sets. Available with in-line filters (1.2 or 0.2 micron) if needed
- Free flow and back flow prevention
- On-screen pressure bar graph

### Patient confidence

- The BodyGuard™ pump's long battery life on a single charge can give your patients the confidence and freedom they need to carry out their day to day activities
- Our range of supporting accessories promote mobility as well as discretion

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Total parenteral nutrition (TPN)



Intermittent



25 doses



Continuous

# Palliative care

Palliative care refers to the specialised medical treatment and care that is provided to people living with a serious illness.<sup>4</sup> Typically, this type of care is focused on relieving the patient's symptoms as well as the stress that they may be experiencing. Any child or adult who has a serious or life-threatening illness such as cancer, neurological, heart failure or other disorders may receive this type of care. Usually, patients can receive treatment at home surrounded by their loved ones to gain an improved quality of life.

## What you need to start palliative care

The BD BodyGuard™ and BodyGuard™ T pumps are designed for the infusion of medication or fluids requiring continuous or intermittent delivery at precisely controlled rates through all clinically acceptable routes of administration including intravenous, subcutaneous, percutaneous, in close proximity to nerves and into intraoperative sites.

By using BD Palliative Care solutions, not only are you providing accurate and reliable infusion systems that are configurable for a range of applications, you are also helping ensure that your patients receive their treatment with dignity and freedom.



Ref. 999-103



Ref. 999-603

### The BD BodyGuard™ T

1. The BD BodyGuard™ T syringe pump (50ml syringe maximum)
2. Power cord or battery charging cable
3. 9 V Alkaline Battery (to be ordered separately)
4. Directions for Use (in print out format)
5. 30 ml Lockbox

### The BD BodyGuard™ (in 25 doses Mode)

1. The BD BodyGuard™ infusion pump in 25 doses mode
2. Power cord or battery charging cable
3. Rechargeable battery pack 1800mAH (inside pump)
4. Directions for Use (in print out format)

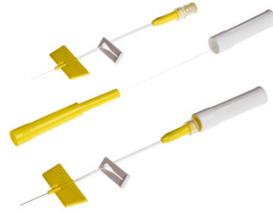
## BD Bodyguard™ Microset - Infusion Sets Range

Reference	Image	Tubing length (cm)	Tubing inner diameter (mm)	Priming volume (ml)	Additional features
GEN00001		230	1.6	4	Slide Clamp
GEN00002		240	1.6	5	1 Needle-free 1 Slide Clamp
GEN00014		230	1.6	4	Slide Clamp
120-160XYSK		240	1.6	16	1 Needle-free 2 Slide Clamps
M100-170SB		200	1.6	4	Pump syringe extension set

## BD Plastipak™ Syringes



## BD Saf-T-Intima™ Catheter



## Accessories



BG T Lockbox  
Ref. 100-174S



Pouch Carrying BG T + L.BOX  
Ref. 100-176SD



Pouch, carrying, small  
Ref. 100-176S



100ml carrying bag  
Ref. 150-000X



Wall charger  
Ref. 999-WC



Rechargeable battery  
Ref. 130-050XV

### Patient comfort

- BD BodyGuard™ and BD Bodyguard™ T are small and lightweight with the T pump weighing 277g (with battery), which makes them easy to transport
- Patients can easily check the status of their infusion, at all times
- A three-point automatic detection and recognition feature allows fast setup and supports most syringes in the market (in sizes from 2 to 50ml)

### Patient safety

- A unique algorithm detects the volume of drugs
- Code-protected functions allow only authorised personnel to change the settings
- Automatic alarms draw immediate attention
- Lockboxes prevent patient access to the medication
- Infusion sets with back flow and free flow protection

### Patient confidence

- A range of accessories as well as mount options that helps enable patient safety and mobility
- A lockable keypad minimises accidental key presses
- Long battery life ensures freedom and flexibility for all

To order or learn more about how BD can assist in your efforts to bring this valuable therapy to more patients, contact your local BD sales representative.

# BD integrated care solutions at a glance

## Total parenteral nutrition



Total parenteral nutrition (TPN)

The BD BodyGuard™ Infusion System

## IV antibiotic therapy



Intermittent

The BD BodyGuard™ (in intermittent mode)

## Immunoglobulin therapy - intravenous



25 doses



The BD BodyGuard™ (in 25 doses Mode)

## Palliative care



Continuous

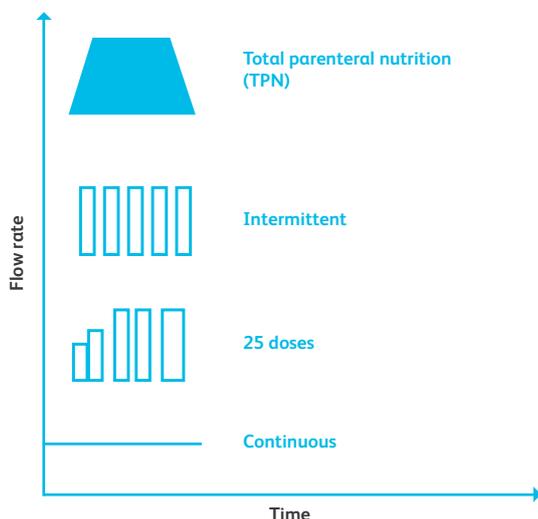


The BD BodyGuard™ T



The BD BodyGuard™ (in continuous mode)

## Dose profiles



Total parenteral nutrition (TPN)

Intermittent

25 doses

Continuous

Flow rate

Time

# Pump specifications

## BD BodyGuard™ infusion pump specifications

### Dimensions and weight

Weight (with standard battery) 410 g

Pump only (H/W/D) 112 x 89 x 40 mm

### Wide flow rate range

0.1 - 1200 ml/h

Piggyback (Secondary) 0.1 - 1200 ml/h

Bolus 0 - 1200 ml/h

KVO Rate 0 (OFF) - 20 ml/hr

Flow rate accuracy\*  $\pm 5\%$

### Volume to be infused

0.1 - 9999 ml

### Patient safety

Ultrasonic Air Sensor Air bubble size 0.04 – 2 ml

Occlusion Pressure 100-1500 mmHg  
(10 mmHg increments)

### Programmable infusion time (Dose over time)

100 hrs

### Complies with the current version of the following standards

IEC 60601-1, IEC 60601-1-2, IEC 60601-1-6, IEC 60601-1-8,  
IEC 60601-1-11, IEC 60601-1-12, IEC 60601-2-24

\* achieved under nominal conditions

\*\* Only trained CME or BD associates or authorized representatives are allowed to configure BD BodyGuard™ infusion and syringe pumps and upload the clinician-approved protocols to supported pumps.

### Protocols library

Fully programmable drug library, with automatic calculation of drug concentration programmable via PC with BodyComm™ software\*\*

Up to 128 drugs referred to as protocols

2000 user events log

### Power supply

110-240 VAC, 50/60 Hz. 0.3A max

### Battery specifications

Rechargeable Li-Polymer 7.4 V Battery

1800 mAh.

#### Rate (mL/h)

#### Approx. Battery life (hours)

25 & 125

15

1200

8

**3600 mAh. Life at 125 ml/h (optional) up to 30 h**

### Pump alarms/alerts

Air in line / Up Occlusion, Down Occlusion, Near End Program, End Program / End of Infusion, Low Battery, End Battery, Pump Unattended, Door Open, System Error, Missing Set Key, with the use of flow sensor accessory

### Additional specifications

Insulation class II, type CF

Ingress Protection: IP33

Linear Peristaltic mechanism

# Pump specifications

## BD BodyGuard™ T syringe pump specifications

### Dimensions and weight

Weight (without battery) 230g

Pump only (H/W/D) 169 x 53 x 23 mm

### Flow rate

Adjustable between 0.1 ml/h and 650 ml/h

KVO Operation Rate 0 ml/h O (OFF)-5.0 ml/h

Flow rate accuracy -  $\pm$  5 %\*

### Bolus

Bolus flow rate 1-650 ml/h

Bolus volume 0-20 ml in 0.1 ml increments

### Programmable infusion time

1 min-99 h

### Syringe sizes

2 ml to 50 ml (most commonly used manufacturers) \*\*

### Complies with the current version of the following standards

IEC 60601-1, IEC 60601-1-2, IEC 60601-1-6, IEC 60601-1-8, IEC 60601-1-11, IEC 60601-2-24, IEC 62304 and IEC 62366

\* achieved under nominal conditions

\*\* maximum syringe volume between 33.6ml and 38ml depending on syringe brand  
Please refer to the Direction for Use for maximum volume to be infused

### Patient safety

Occlusion Pressure adjustable 200-1500 mmHg

Post Occlusion Bolus Reduction System (POBRS)

### Battery specifications

9 V alkaline, IEC 6LR61 type

Rate (mL/h)	Approx. Battery life (hours)
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1 ml/h	25
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5 ml/h	20
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### Pump alarms/alerts

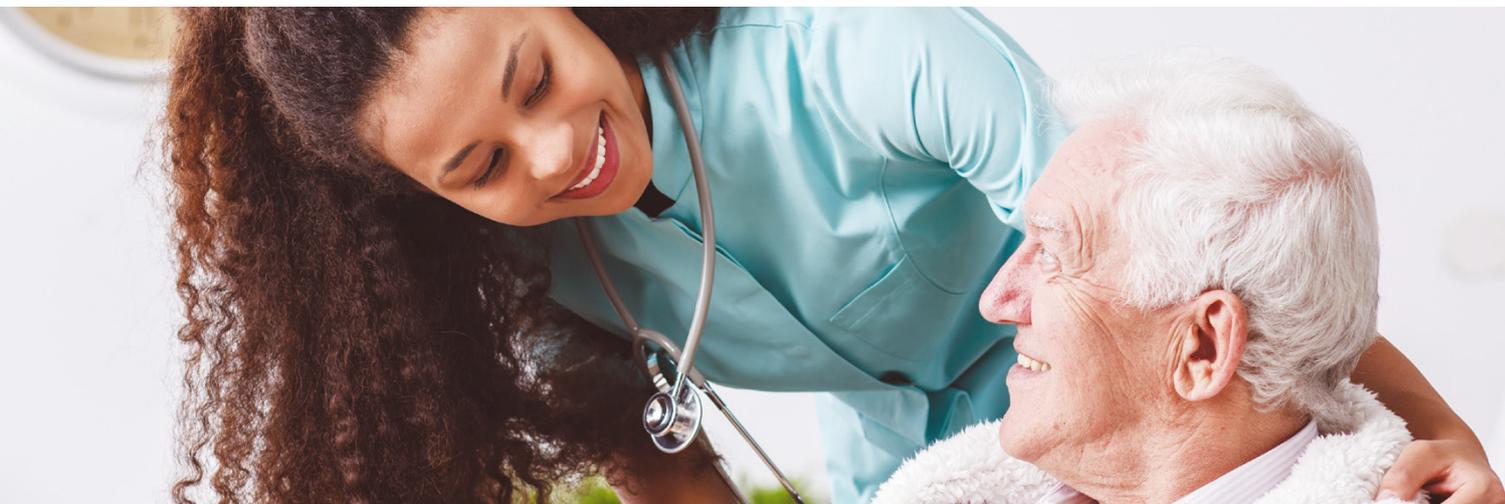
Occlusion or Syringe Empty, Syringe Displaced during infusion, End Program, System Error, End Battery

### Additional specifications

Insulation class II, type CF

Ingress Protection: IP22

Linear syringe driver mechanism



# Notes

1. <https://voice.ons.org/news-and-views/remembering-margo-mccafferys-contributions-to-pain-management>
2. ESPEN guidelines on chronic intestinal failure in adults, January 2016
3. <https://www.aci.health.nsw.gov.au/ie/projects/home-based-subcutaneous>
4. <https://getpalliativecare.org/whatis/>

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