

HYPERTHERMIA PUMP[™] Safely Deliver Hyperthermic Therapy

SAVING LIVES. TOGETHER.



BELMONT



高雄市左營區明誠二路332號4樓之3 TEL: (07)5582188 FAX: (07)5569943 https://www.cosmomed.com.tw

BELMONT

INTRAPERITONEAL & INTRATHORACIC **HYPERTHERMIA**



HIGHLY EFFICIENT



USER-FRIENDLY



COMPACT DESIGN

HYPERTHERMIA PUMP[™]

Hyperthermia Pump[™] is used in therapeutic procedures to raise the temperature of the thoracic or peritoneal cavity to the desired target temperature by continuously lavaging the cavity with warmed sterile solution. The warm solution is pumped into a body cavity, withdrawn, reheated, and recirculated back to the body. To ensure safe operation, the system monitors line pressure and air in the fluid path while two sterile temperature probes located within the sterile field and two embedded temperature probes monitor patient cavity, outflow solution, and return solution temperature.

PRECISE TEMPERATURE CONTROL

Adjustable fluid temperature control range between 37°C and 48°C in 0.1°C increments.

ELECTROMAGNETIC INDUCTION HEATING

Dry, single pass warming provides consistent fluid temperature and enables near instantaneous warming to target temperatures with zero warmup time.

COMPACT AND LIGHTWEIGHT

Designed with space in mind, the system conveniently mounts to any standard IV pole and is up to 84% lighter (28.5 vs. 175 lb) and 90% more compact (0.7 vs. 6.8 ft³) than comparable systems.

HIGH-SPEED PERISTALTIC PUMP

Precise control of fluid delivery with flow rates ranging from 2.5 to 1000 ml/min.

VACUUM ASSISTED OUTFLOW

Incorporates vacuum regulator to maximize flow equilibrium and enable fine tuning of fluid return rate.

AUTOMATIC PRESSURE REGULATION

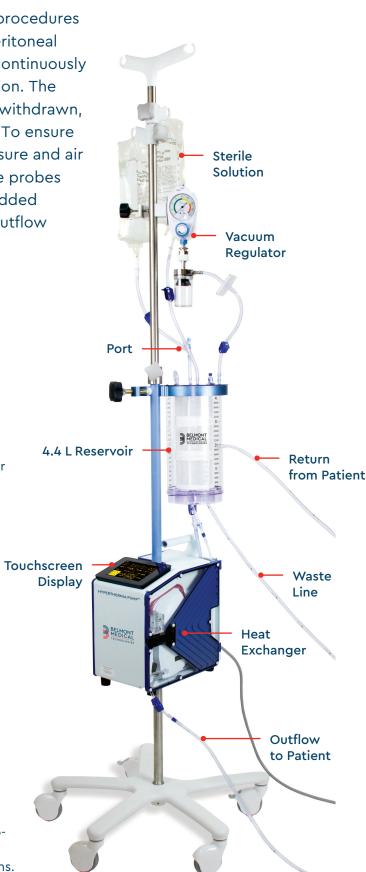
Line pressure monitoring stops pump if line becomes obstructed to prevent leaks.

QUICK SETUP

Disposables incorporate pre-assembled cannulas with quick release connections and embedded temperature probes.

EASY TO USE

Intuitive and clutter-free touchscreen display with stepby-step, on-screen instructions, clear descriptions of alarms and alerts, and quick access to device operations.



INTUITIVE TOUCH-SCREEN DISPLAY

REAL-TIME DISPLAY OF:

- Flow Rate
- Line Pressure
- Target Fluid Temperature
- Total Volume

- Fluid Inflow Temperature • Fluid Outflow Temperature Two Additional Temperature Sensors

DISPOSABLE CONFIGURATIONS



STRAIGHT LINE SET

PROCEDURE PACK

NO CUTTING, NO CLAMPS - JUST CLICK AND CONNECT.

- Quick-connect luer connections allow for easy setup. There is no need to cut and reconnect tubing.
- Outflow tubing temperature probe reads the outflow temperature before bifurcations.
- Return tubing temperature probe automatically averages the temperature of all returned fluids.
- 72" temperature probes allow for connection outside of the sterile fluid field.

High contrast display provides easy to follow on-screen instructions, clear descriptions of alarms and alerts, and quick access to device operations.

\oplus			
T1 =	42.0°C	T2 =	42.2°C
T3 =	42.5°C	T4 =	42.6°C
RATE = $1000 \frac{ml}{min}$		Tpump = $42.7^{\circ}C$	
V0L =	2173 ml	P = 172	mmHg
RATE 🔺	1000 <u>ml</u> min RATE	TARGET ▲ 42.5C	STOP
RATE 🔻		TARGET ▼ 42.5C	





BIFURCATED LINE SET

CANNULA CONNECTOR

The Procedure Pack is designed to save time and money by simplifying complicated tubing setups into a single, comprehensive and easy to install kit.



ORDERING INFORMATION

HYPERTHERMIA PUMP

- US: Part #902-00001 (120V)
- International: Part #902-00001A (230V)

CANNULA CONNECTOR

Part #902-00036 (12/box)

STRAIGHT LINE SET

Part #902-00037 (1 kit)

BIFURCATED LINE SET

Part #902-00038 (1 kit)

PROCEDURE KIT

Part #902-00045

(1) 4.4 Liter Reservoir (902–00034P) (1) Heat Exchanger (902-00006P) (1) Procedure Pack (902-00048P) contains: Double lumen patient line with (2) temperature probes*

- (2) Extra temperature probes
- (2) Sumps
- (2) Via-Guard® Poole Converter Sleeves

*Each temperature probe is 72 inches (1.83 meters) in length, allowing connection outside the sterile field.

HARDWARE SPECIFICATIONS

DIMENSIONS

13.5 in. x 7.5 in. x 12 in. (34.29 cm. x 19.05 cm. x 30.48 cm.)

WEIGHT 28.5 lb. (12.9 kg.)

PORTABILITY

Quick-on IV pole mount/handle at top of unit

POWFR

115-120 volt or 220/240 volt AC input

BATTERY

Internal, rechargeable for transport Operates all functions without heating

FLUID PUMP

Roller type peristaltic pump Flow rate 2.5-1000 ml/min

HEATER

Dry, electromagnetic induction (water-free) Adjustable between 37-48°C in 0.1°C increments Maximum applied power: 1440 watts

SENSORS

Up to 4 temperature sensors (2 patient cavity, 1 outflow, 1 return), 2 ultrasonic air detectors, pressure transducer, 2 infrared temperature sensors, pump infusion rate sensor, open door detector, and valve activation sensors

CONTROL COMPUTER

Built-in, controls all functions Redundant hardware override protection in case of computer failure

DISPLAY

LCD type with waterproof touch pad

External Dimensions

5.85 in. x 4.12 in. 148.1 mm x 104.7 mm

Active Area

4.53 in. x 3.40 in. 115.1 mm x 86.3 mm





PATIENT WARMING





i



780 BOSTON ROAD BILLERICA, MA 01821, USA USA: 866.663.0212 WORLDWIDE: +1 978.663.0212 FAX: 978.663.0214 WWW.BELMONTMEDTECH.COM

Hyperthermia Pump[™] has been evaluated with respect to electrical shock, fire and mechanical hazards in accordance with applicable standards.

Belmont Instrument LLC Registered to ISO 13485 File Number: A18173

Belmont Medical Technologies[™] is a trademark of Belmont Instrument, LLC 2020 © Belmont Instrument, LLC | 701–00014 Rev. C

