

# Mistral-Air®

Forced Air Warming



Safe, comfortable & optimised  
Forced Air Warming



The Surgical  
Company

PTM

Specialization through Innovation

Preventing inadvertent perioperative hypothermia helps to reduce surgical site infections, the length of hospital stays and the costs per patient.<sup>1,2,3</sup> The Mistral-Air® Warming Unit is a Forced Air Warming device which enables **safe<sup>4</sup>, comfortable and optimised** management of patient temperature to

achieve normothermia. Mistral-Air® Warming Blankets are adaptable to most surgical cases, safe and comfortable for the patient. Mistral-Air® Warming Blankets are aerodynamically designed to distribute warmed air evenly throughout the blanket and, through controlled diffusion, evenly over the

patient. Additional features such as the size, the tuck-in flaps and the attuned blower-blanket design ensure the blankets drape perfectly over your patient, resulting in optimised heat transfer towards the patient, improving your patient's outcome through optimised patient warming.

## MISTRAL-AIR® WARMING BLANKETS

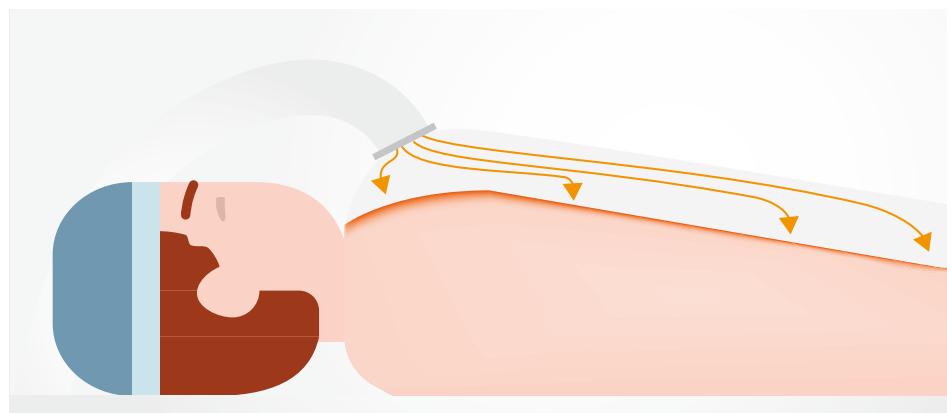
## Mistral-Air® Forced Air Warming



### CONTROLLED DIFFUSION

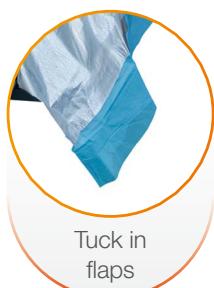
The controlled diffusion of air is the result of the warming unit delivering a large volume of warm air to a low-pressure blanket. The warmed air is distributed evenly throughout the warming blanket due to the aerodynamic design and then evenly distributed over your patient through the permeable layer of the Mistral-Air® Warming Blankets.

This technology, together with the tuck-in flaps ensure Mistral-Air® warming blankets stay in place and keep warm air on the patient. As a result, the airflow in the environment is not disturbed and there is no need to add cotton linens or other drapes to keep Mistral-Air® warming blankets in place.



#### Key Features:

- Optimised heat transfer
- No floating
- No disturbance of airflow
- No need for extra cotton blankets



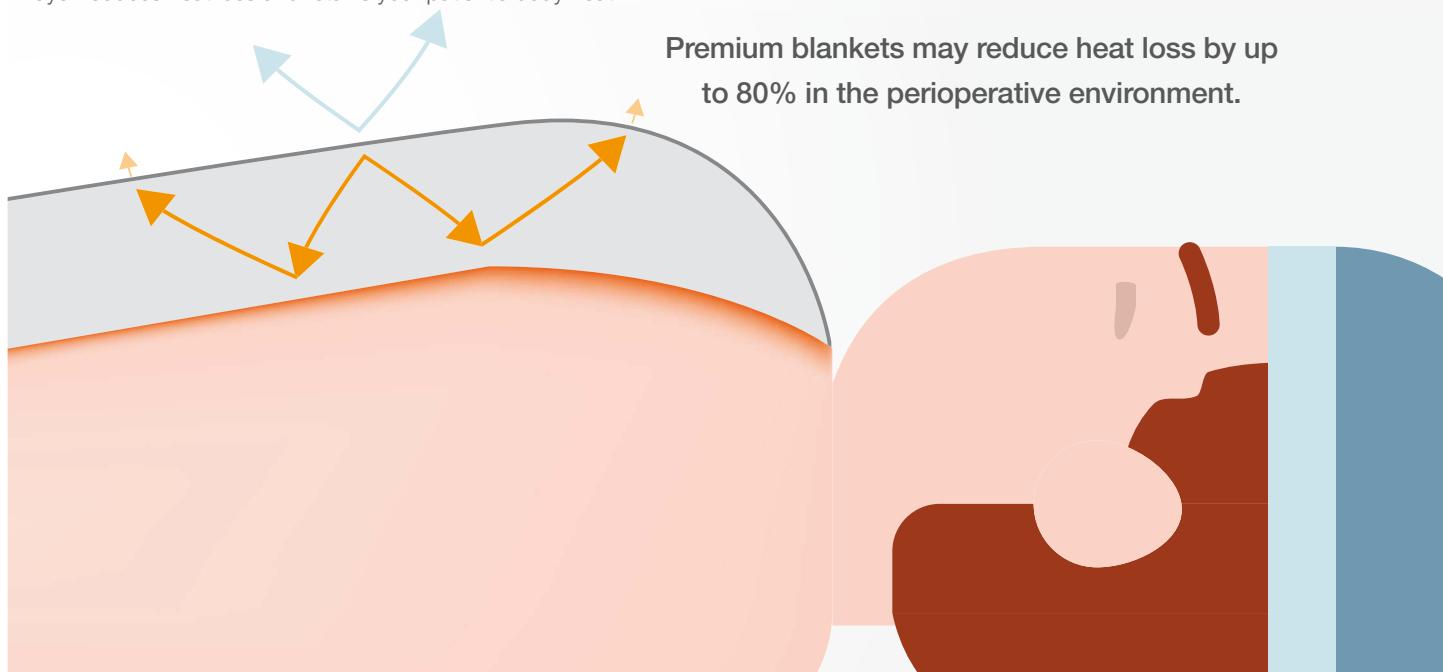
# PREMIUM PERFORMANCE

The unique Mistral-Air® Premium Blankets have **an insulating top layer**, which increases the warming capacity with at least **10%** by reducing radiant heat loss.

Premium blankets can be used for:

- **active warming:** with warmed air by warming unit. In the pre- and postoperative phase and during the operation
- **passive warming:** without warmed air, such as during transit periods. The insulating top layer reduces heat loss and retains your patient's body heat.

Premium blankets may reduce heat loss by up to 80% in the perioperative environment.



## MISTRAL-AIR® WARMING SUITS

Mistral-Air® warming suits are designed to be used in any situation during the peri-operative pathway. The suit can be used as a full body blanket from the pre-operative phase by replacing the hospital patient gown.

After pre-warming, the warming suit can be split into an upper body and a lower body blanket, suitable for use during surgery.

Mistral-Air® warming suits can replace:

- hospital patient gowns
- cottons blankets
- Forced Air Warming blankets



# SAFE & OPTIMISED WARMING UNIT

The Mistral-Air® Forced Air Warming unit allows therapy to start within 30 seconds and is comfortable to handle. The unit is lightweight, easy to clean and made of impact-resistant material and also available with a quick-connect functionality (art. no. MA1200-QC-EU) for easier hose changes and it also allows the hose to rotate 360° for optimal positioning range.

**Improve patient outcome through safe, comfortable, and optimised patient warming.**

"Mistral-Air® offers a wide range of dedicated solutions for optimised patient warming throughout the entire perioperative pathway."



## The Mistral-Air® Forced Air Warming unit:

- Optimised heat transfer due to Multi Sensor Technology & Powerful Fan
- Elimination of air contaminants through the HEPA filter
- Ergonomic and flexible in use due to the slim & lightweight design

Equipped with a versatile mounting bracket, the slim Mistral-Air® warming unit offers caregivers a diversity to securely position the warming unit in all care areas.

**More mounting options! Mistral-Air® Mounting Parts:** Art. Number: MA5002

<b>Standard Mounting:</b> Universal mounting options	<b>Mounting Extension Kit:</b> Extend the number of mounting options
Trolley or IV Pole      ISO bed rail	Extension Kit      Bed Brackets      Wall Mount Option

## Mistral-Air® Warming Unit (Quick-Connect) | Article number MA1200-EU (MA1200v-QC-EU)

Voltage, Frequency, Current	220 - 240VAC, 50/60Hz, 3.2A
Average power	600W
Dimensions	160mm x 350mm x 400mm (l x w x h)
Weight	5.2kg
Hose length	1.8m
Power cord length	4.0m
Set temperature	32°C, 38°C, 43°C or Ambient Air
Filtration	HEPA H13 class filter, conform EN 1822-1:2009
Classification IEC 60601-1	Class I, Body Floating (BF)
Classification IEC 60529	IP23
Classification 93/42/EEC	Class IIb



## Mistral-Air® QC Hose / QC Hose XL | Article number MA1200-1018 / MA1200-1018XL

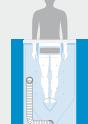
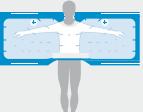
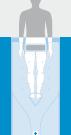
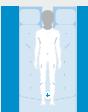
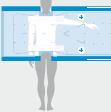
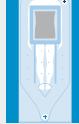
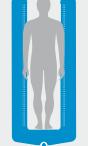
Length QC Hose (standard)	1.8m
Length QC Hose XL (optional)	3.0m

## Mistral-Air® Adjustable Pole with Basket | Article number MA5250

Dimensions Pole	685-935mm ± 10mm height, ø 25mm
Dimensions Base	ø 605mm
Castors	5 latex free, with brakes
Basket dimensions	195mm x 295mm x 250mm

# BLANKET OVERVIEW

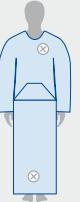
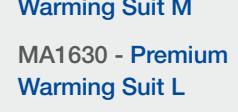
## INTRAOPERATIVE

 <p>MA3350 (Premium) MA2250 (Plus) <b>Lower Body</b> 1320 x 1330 mm</p>	 <p>MA2270 (Plus) <b>Torso</b> 1240 x 760 mm</p>	 <p>MA2286 <b>Cardiac / sterile</b> 1700 x 1330 mm</p>
 <p>MA3360 (Premium) MA2260 (Plus) <b>Upper Body</b> 2010 x 760 mm</p>	 <p>MA2285 <b>Lower Surgical Access sterile</b> 1830 x 1330 mm</p>	 <p>MA3330 (Premium) MA2230 (Plus) <b>Paediatric</b> 1660 x 1330 mm</p>
 <p>MA3365 (Premium) MA2265 (Plus) <b>Half Upper Body</b> 1625 x 760 mm</p>	 <p>MA2290 / MA2280 <b>Surgical Access / sterile</b> 2200 x 1330 mm</p>	 <p>MA0510 <b>Tube</b> 1750 x 150 mm</p>

## PACU

 <p>MA3320 (Premium) MA2220 (Plus) <b>Adult</b> 2270 x 1330 mm</p>	 <p>MA3340 (Premium) / MA2240 (Plus) <b>Neonatal</b> 1160 x 1330 mm</p>	 <p>MA3475 (Premium) / MA2475 (Plus) <b>Paediatric Underbody</b> 1680 x 900 mm</p>
 <p>MA3330 (Premium) MA2230 (Plus) <b>Paediatric</b> 1660 x 1330 mm</p>	 <p>MA3400 (Premium) / MA2400 (Plus) <b>Full Underbody</b> 2200 x 900 mm</p>	 <p>MA3450 (Premium) / MA2450 (Plus) <b>Half Underbody</b> 1680 x 900 mm</p>

## SUITS

 <p><b>MA1610 - Premium Warming Suit S</b></p>	 <p><b>MA1710 - Warming Suit S</b></p>
 <p><b>MA1620 - Premium Warming Suit M</b></p>	 <p><b>MA1720 - Warming Suit M</b></p>
 <p><b>MA1630 - Premium Warming Suit L</b></p>	 <p><b>MA1730 - Warming Suit L</b></p>
 <p><b>MA1640 - Premium Warming Suit XL</b></p>	 <p><b>MA1740 - Warming Suit XL</b></p>

## The Surgical Company PTM - Specialization through Innovation

Our Patient Temperature Management product portfolio is all about offering solutions for patient warming, about keeping patients at a constant healthy body temperature.

The Surgical Company PTM is working with respected medical professionals to accomplish continuous innovation, improve patient outcome and to reduce health care costs. This by providing training, education and economically justified, best-in-class products.



- 1 Luna G.K., et al., Incidence and Effect of Hypothermia in Seriously Injured Patients, The Journal of Trauma (1987)
- 2 Jurkovich G.J., Hall G.M., Hypothermia in trauma victims: An ominous predictor of survival, The Journal of Trauma (1987)
- 3 Kurz A., Sessler D., Lenhardt R., Perioperative normothermia to reduce the incidence of surgical-wound infection and shorten hospitalization. Study of Wound Infection and Temperature Group, New England Journal of Medicine (1996) 334: 1209-15
- 4 in compliance with all applicable safety standards and guidelines.

## Virtual37® Temperature Management Tool

Virtual37 is a Temperature Management Tool. This simulation tool offers an innovative and easy way to understand the impact of the warming balance and the warming decisions taken in surgeries.

The tool has been validated by University Hospital Ghent, Belgium.



**Mistral-Air®**  
Forced Air Warming

**Fluido®**  
Blood and Fluid Warming

**Thermoflect®**  
Heat Reflective Technology

**Fluido® Irrigation**  
Fluid Warming

**Broncoflex®**  
Single-use Bronchoscope

**Sensium®**  
Wireless Vitals Monitoring

Fluido® and Mistral-Air® are registered trademarks of The Surgical Company International B.V. Fluido® products are covered by the following European patents: 1313521 and 1446179. Mistral-Air® Blankets Plus are covered by the following American patent: 12/342,933. Other patents pending. Thermoflect® is a registered trademark of Encompass Group, LLC.