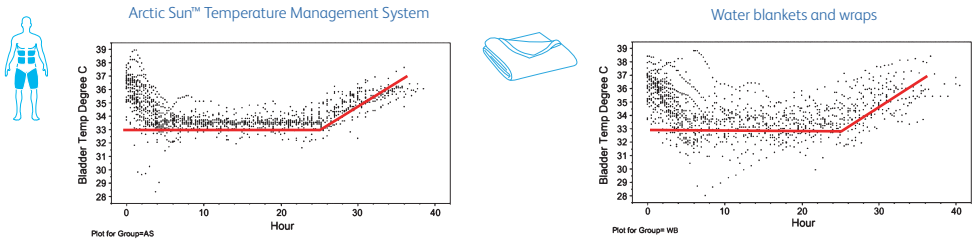
BD Arctic Sun™ System - Advanced Targeted Temperature Management

The Arctic Sun™ System advanced algorithm checks the patient temperature **86,400** times in a **24 hour** period. For the critically ill patient, are you trying to influence temperature or control temperature to a prescribed target dosage and duration?

1 Precision of therapy

There is a difference.

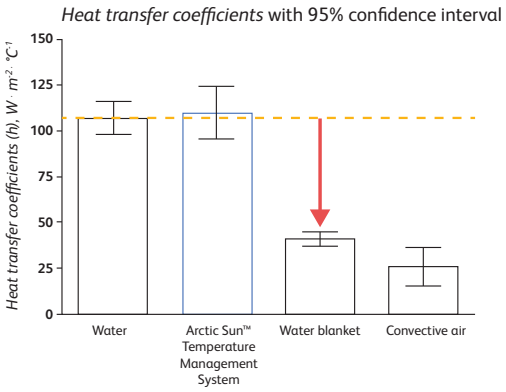


"The Arctic Sun™ Temperature Management System provides much more precise control of temperature than standard cooling blankets." [1]

[1] Heard KJ, et al, Resuscitation, 2009.

2 Efficient Heat-transfer

Water immersion is the gold standard.



Bench data may not represent clinical outcomes. Different methodologies may yield different results.

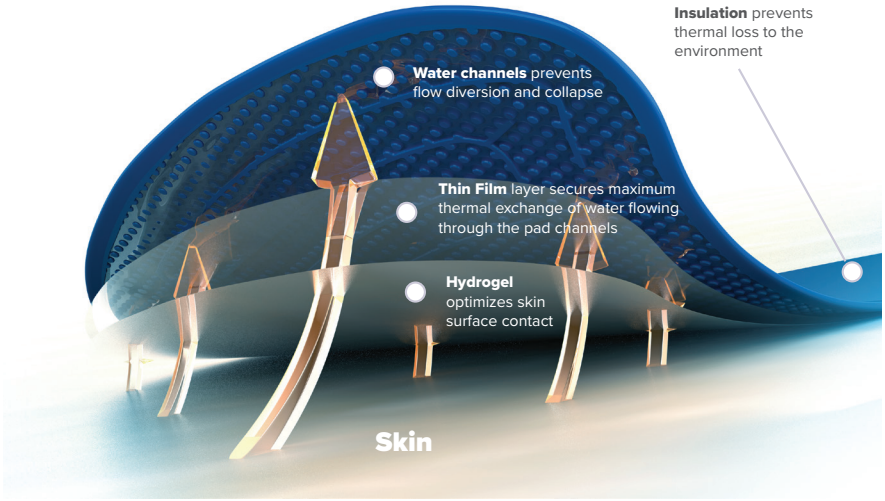
"Water immersion is the most effective external method in altering core temperature." [2]

"The Arctic Sun™ Temperature Management System's heat transfer rate is equal to water immersion." [2]

[2] English MJ, et al, European Journal of Anaesthesiology 2008; 25:531-537.

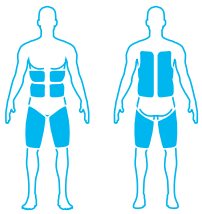
3 Patient Interface

The method of heat-transfer.

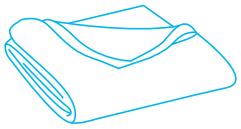


BD

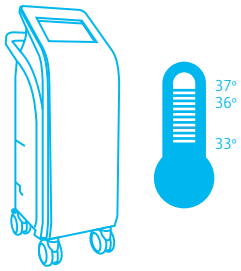
Just the facts.



Arctic Sun™ Temperature Management System



Water Blankets and Wraps



Advanced algorithm checks patient temperature every second and micro-adjusts water temperature every two minutes.

"These simple methods of cooling, while easy to implement, were not specifically designed for rapid cooling of critically ill patients and do not provide precision body temperature control during maintenance and reversal of hypothermia." [1]

1. Heard KJ, et al, Resuscitation, 2009.

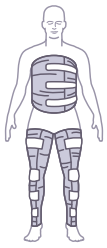
ArcticGel™ Pads use hydrogel. Hydrogel is skin friendly and used in many wound care products. Hyrdogel creates a conductive layer for efficient heat transfer away from the patient.

Other surface cooling devices do not use Hydrogel which is a less efficient form of heat transfer called convection.

ArcticGel™ Pads are designed not to leak. The negative pressure system prevents water escape if pierced or punctured.

Water blankets and wraps leak into the care environment when cut or punctured.

X-Ray, Cat Scan, MRI, and Cath Lab compatible. Water can be flowing during imaging.



"Circulating water during an x-ray can create shadowing... drain the water from the blankets attached."

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Federal Law (USA) restricts this device to sale by or on the order of a physician.

Indications for Use
The Arctic Sun™ Temperature Management System is a thermal regulating system, indicated for monitoring and controlling patient temperature in adult and pediatric patients of all ages.

Contraindications
There are no known contraindications for the use of a non-invasive thermoregulatory system. Do not place ArcticGel™ Pads on skin that has signs of ulcerations, burns, hives or rash. Do not remove the fabric release liner of the Neonatal ArcticGel™ Pad and expose the hydrogel. Do not place ArcticGel™ Pads on immature (non-keratinized) skin or premature babies. While there are no known allergies to hydrogel materials, caution should be exercised with any patient with a history of skin allergies or sensitivities.

Warnings
When using the Arctic Sun™ Temperature Management System, note that all other thermal conductive systems, in use while warming or cooling with this device may interfere with patient temperature control.

Cautions
Due to underlying medical or physiological conditions, some patients are more susceptible to skin damage from pressure and heat or cold. Patients at risk include those with poor tissue perfusion or poor skin integrity due to edema, diabetes, peripheral vascular disease, poor nutritional status, steroid use or high dose vasopressor therapy. Examine the patient's skin under the ArcticGel™ Pads. Skin injury may occur as a cumulative result of pressure, time and temperature. Carefully remove ArcticGel™ Pads from the patient's skin at the completion of use. Aggressive removal or removal of cold pads from the patient's skin may result in skin tears. The rate of temperature change and potentially the nal achievable patient temperature is a ected by many factors. Treatment application, monitoring and results are the responsibility of the attending physician. If the patient does not reach target temperature in a reasonable time or the patient is not able to be maintained at the target temperature, the skin may be exposed to low or high water temperatures for an extended period of time which may increase the risk for skin injury.

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