

smiths

Smiths Medical

Temperature Management

It's not warm unless
it's Level 1[®] warm.



1[®] Fast Flow
HOTLINE[®]
NormoFlo[®]
Snuggle Warm[®]
Probes

LEVEL
Warmth

Warmer patients. Better outcomes. That's Level 1® warmth.

Everyday, your colleagues all over the world rely on Level 1® products. That's because Level 1® products provide proven and dependable solutions that help you save lives, decrease hospital stays and reduce infection rates.

As the leader in temperature management, Level 1® products provide a comprehensive selection of innovative solutions for the entire continuum of care. From rapid infusion to routine blood and fluid warming to irrigation warming, temperature monitoring and convective warming — we help healthcare professionals like you improve patient outcomes in every setting every day.

At Smiths Medical, we believe that innovation goes well beyond products. That's why we collaborate closely with clinicians to ensure that all of our Level 1® products and services satisfy your patients' needs as well as your own.



Leaders in patient safety

- Introduced Air Detection for rapid infusion, taking patient safety to a new level
- Introduced the only blood and fluid warmer that delivers consistent warmth at all routine flow rates, protecting patients from hypothermia
- Introduced precise hose-end temperature control in convective warming products to reduce the risk of thermal injury
- Introduced a full line of temperature monitoring products that provide accuracy for early diagnosis of hypothermia, hyperthermia and malignant hyperthermia

LEVEL 1®
Fast Flow
HOTLINE®
NormoFlo®
Snuggle Warm®
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Level 1[®] Fast Flow Fluid Warmer

The standard of care for rapid infusion.

When you're working to save a patient's life, every second counts.

When lives are at stake from significant blood loss due to trauma or major surgery, the Level 1[®] Fast Flow Fluid Warmer provides a rapid flow of normothermic blood and I.V. fluids. Even a small drop in body temperature can be detrimental — delaying recovery or allowing infection to set in.



Air Detection for an additional level of safety

Smiths Medical is committed to providing products you can count on to reduce the risk of hypothermia and improve your patients' outcome. The Level 1[®] Fast Flow Fluid Warmer with integrated Air Detector/Clamp provides that extra level of protection.

- Detects the presence of a bolus of air in blood and crystalloid
- Automatically stops the flow and alerts clinicians with audible and visual alarms
- Allows quick removal of air and restoration of flow without disconnecting from patient or changing disposables

Flow rates for every clinical need

We offer a full line of disposable administration sets, which provide a wide range of flow rates as well as accessories that maximize the performance of the fast flow system. It's just one more way that we remain responsive to your needs.

- Normothermic flow rates from 300mL/min to 1,000mL/min¹
- Maximum flow rates from 675mL/min to 1,255mL/min¹
- Gas Vent/Filter Assembly can be changed without changing the entire disposable
- Compatible with all previous generations of Level 1[®] Fast Flow devices
- Latex-free
- Meets all AABB standards for blood warming²

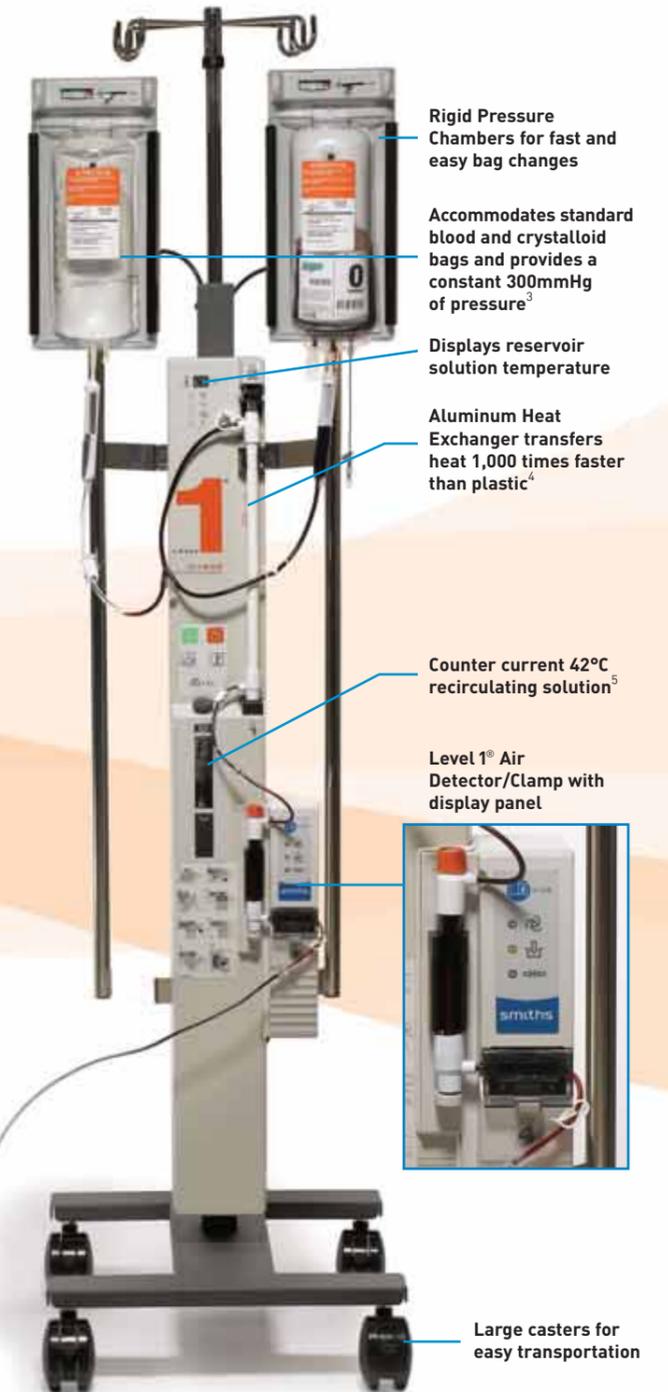
¹ Flow rate $\pm 10\%$; 20°C $\pm 2^\circ\text{C}$ infusate: Using integral pressure chambers

² American Association of Blood Banks. Standards For Blood Banks and Transfusion Services. 23rd Edition

³ 300mmHg (+0 - 12)

⁴ Flancbaum L et al. Evaluation of blood-warming devices with the apparent thermal clearance. Ann Emer Med. 1989; 18:355-9

⁵ 42°C $\pm 1^\circ\text{C}$



LEVEL 1[®] Fast Flow
Warmth
HOTLINE[®]
NormoFlo[®]
Snuggle Warm[®]
Probes

The HOTLINE® Blood and Fluid Warmer

Deliver warmth where it's needed most—the point of patient connection.

Through its Level 1® products, Smiths Medical is committed to keeping your patients warm and comfortable. With the HOTLINE® Blood and Fluid Warmer, you'll be able to protect patients from hypothermia, help reduce recovery time, shorten hospital stays and care for your patients with confidence.

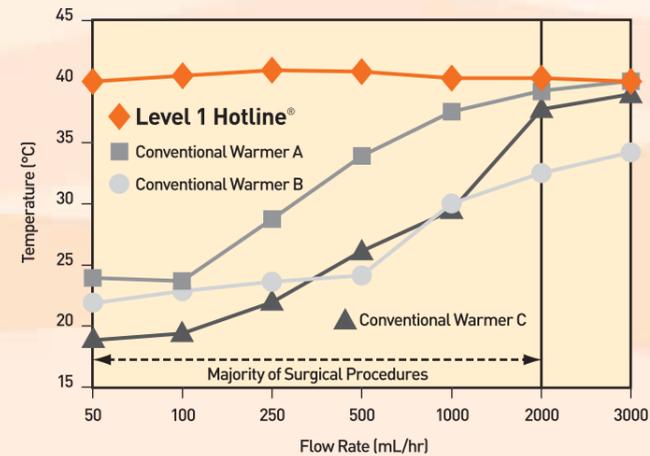
HOTLINE® Fluid Warming technology delivers warmed fluids at or above body temperature at the patient end, where it counts. Whether you need to deliver fluids at KVO or up to 5L/hr, HOTLINE® eliminates patient line cool-down and provides warm fluids at the point of patient connection.

Easy to set up and use

- Simple one-step disposable setup
- Front panel controls are easy to see and activate
- Accommodates all I.V. sets
- Low-maintenance system requires 50% fewer calibration checks than some competitors¹
- Meets all AABB Standards for blood warming²

Built-in safety features

- Shows recirculating fluid set point
- Activates audible and visual alarms if recirculating fluid temperature reaches 43.1°C. Although heating stops, I.V. flow continues



Unlike conventional blood and fluid warming technologies, HOTLINE® eliminates patient line cool-down.³

Longer, 8' (2.4m) heated patient line for greater flexibility

Patented, heated Patient Line prevents blood and I.V. fluid cool-down³

Small priming volume (20mL)

Simple-to-use front panel display with alarm indicators

One-step disposable setup

HOTLINE®
Routine Flow

¹ See Arizant Operator's Manual

² American Association of Blood Banks. Standards For Blood Banks and Transfusion Services. 23rd Edition

³ Block E, et al. Crit Care Med 1999;27(11):Suppl.

LEVEL 1® Fast Flow
HOTLINE®
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The NormoFlo® Irrigation System

A clear field of vision plus increased patient warmth equals safety and stability.

Maintain normothermia even during high-volume surgical irrigation.

Room temperature is considerably lower than body temperature. That's why irrigating solutions that are stored and used at room temperature will

cause your patients' core temperature to drop. The Level 1® NormoFlo® Irrigation System from Smiths Medical helps maintain your patients' core temperature during the entire procedure.

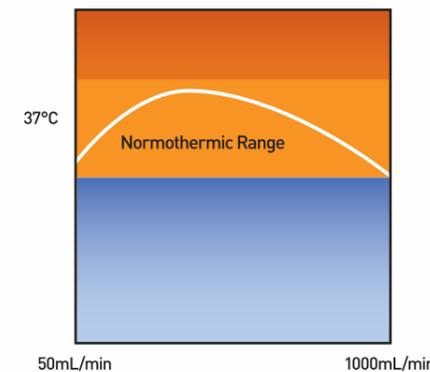
No change in surgical technique

The NormoFlo® Irrigation System is an effective warming system for urology patients undergoing high-volume surgical irrigation. The system delivers a clear, bubble-free field of vision, which allows surgeons to operate with confidence and with *no change in surgical technique*. The NormoFlo® Irrigation System provides safe, superior and consistent performance which improves patient comfort and leads to better outcomes.



Easy to set up and use

- System available with (H-1129) and without (H-1100) Pressure Chambers
- Automatic I.V. pole operation enables safe and effortless bag changes
- Minimal training time; disposables are easily inserted
- Pressure system accommodates standard 1-liter bags in rigid chambers and also includes 3-liter pressure cuffs (System H-1129 only)
- Pressure is adjustable up to 500mmHg (H-1129 with IR-40 disposable only. Other disposables up to 300mmHg.)



The NormoFlo® Irrigation System delivers body temperature fluid at optimum flow rates.



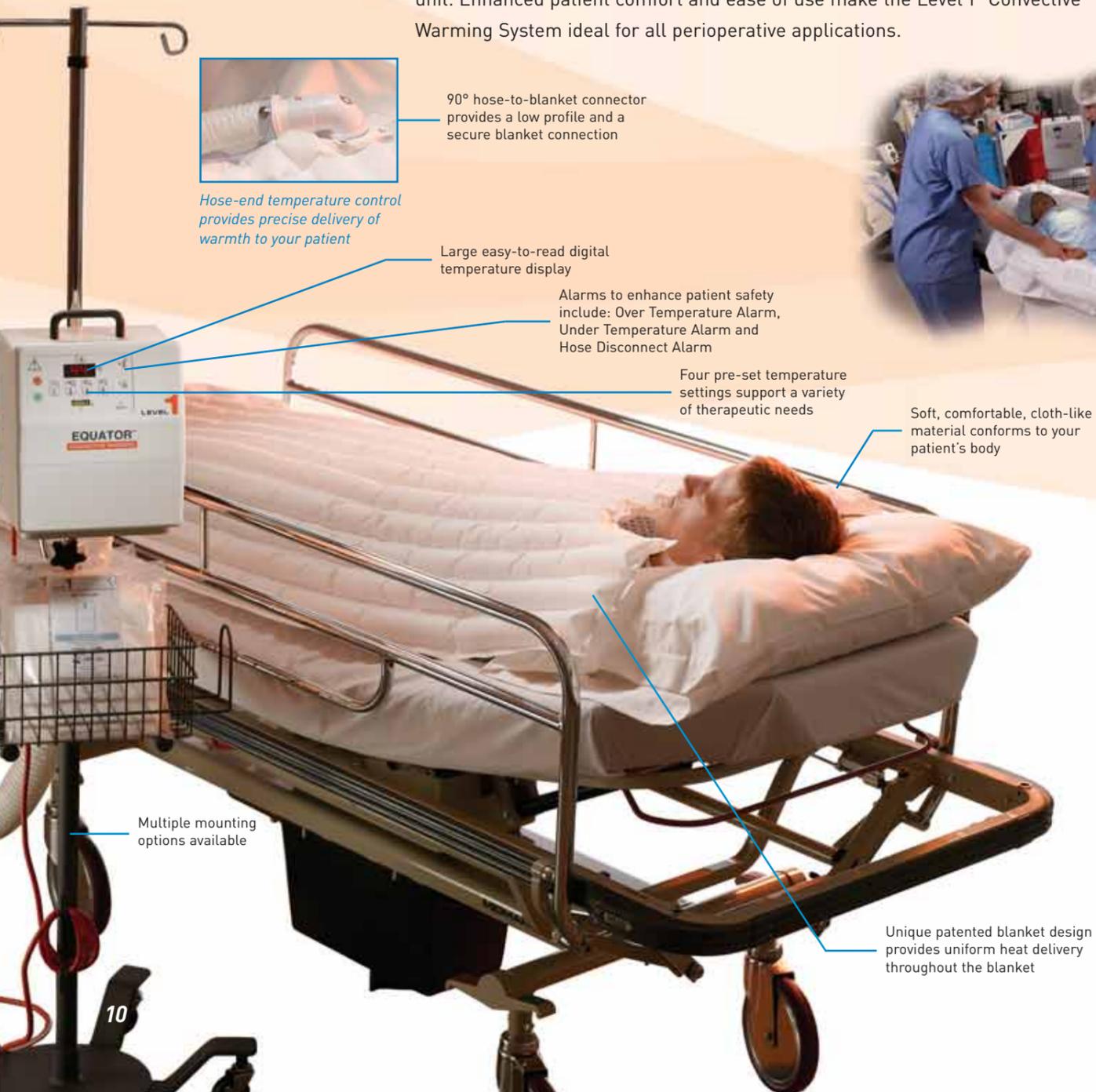
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Snuggle Warm® Convective Warming Blankets

Envelop your patients in Level 1® warmth.

Innovative designs enhance patient comfort.

As the world leader in Temperature Management Solutions, Smiths Medical has developed the Level 1® Convective Warming System to keep patients comfortable and normothermic. This innovative system consists of Snuggle Warm® convective warming blankets and the Equator® convective warming unit. Enhanced patient comfort and ease of use make the Level 1® Convective Warming System ideal for all perioperative applications.



90° hose-to-blanket connector provides a low profile and a secure blanket connection

Hose-end temperature control provides precise delivery of warmth to your patient

Large easy-to-read digital temperature display

Alarms to enhance patient safety include: Over Temperature Alarm, Under Temperature Alarm and Hose Disconnect Alarm

Four pre-set temperature settings support a variety of therapeutic needs

Soft, comfortable, cloth-like material conforms to your patient's body

Multiple mounting options available

Unique patented blanket design provides uniform heat delivery throughout the blanket

Soft, flexible and durable for maximum comfort

Snuggle Warm® convective warming blankets, made of soft, cloth-like material, have been designed to resist tears, punctures and fluids. Each latex-free and radio translucent blanket is easy to use and can be folded and repositioned for quick patient access.

- Large, heat-punched air holes eliminate particulate material
- Precisely placed holes combined with air channel design maximizes heat delivery
- Blankets conform to your patient's body, making it easier to maintain warmth before and after a procedure



Snuggle Warm® convective warming blankets for every patient and every need

Adult	Pediatric	Specialty
Full Body	Full Body	Full Access Tube
Lower Body	Small Underbody (up to 20 Lbs)	Sterile Cardiac
Upper Body • Small • Large	Large Underbody (up to 80 Lbs)	Surgical Access

Ensure the delivery of warm, comforting air

The unique and innovative Equator® convective warming unit provides an optimal flow of warm air in a compact design.

- Patented hose-end temperature control reduces the risk of thermal injury to your patient
- Designed to be quiet, so you can focus your full attention on your patient
- High air-flow provides even distribution of warmed air throughout the blanket

Rolling Cart with I.V. Pole

A coordinating rolling cart with an I.V. pole is also available with the Level 1® Convective Warming System, so clinicians can easily transport the Equator® convective warming unit from room to room.

- Adjustable I.V. pole allows a HOTLINE® unit to be placed above the Equator® convective warming unit
- Large blanket storage basket for added convenience

Level 1[®] Temperature Probes

Safety and accuracy when you need it most.

For accurate, continuous and effective temperature monitoring

The ability to accurately monitor your patient's body temperature is key to effective temperature management. At Smiths Medical, we provide a full line of disposable Level 1[®] Temperature Probes that do just that. Our temperature probes are designed for use at a variety of anatomical sites, providing you greater flexibility based upon the surgical procedure and your patients' specific needs.

Level 1[®] Temperature Probes

- Disposable, sterile probes provide cost-effective monitoring
- Latex-free
- Keyed for a one-way fit to ensure a proper connection
- Insert-molded for uniform connection
- Moisture-resistant, sealed connectors
- Color-coded connectors by series type support ease of use
- A full range of adult and pediatric sizes available to meet your clinical needs

Cable Series	Color	Accuracy
Thermocouple	Blue	± 0.3°C
400 Series	White	± 0.2°C
700 Series	Gray	± 0.1°C
70S Series	Green	± 0.3°C

Neo-Therm[®] Skin Temperature Probes

When it comes to ensuring the safety of your most vulnerable patients, Neo-Therm[®] Skin Temperature Probes offer exceptional safety, quality and durability.

- Designed specifically for the NICU
- Color-coded connectors ensure correct probe-to-cable connection
- Simple and quick setup
- Hypoallergenic adhesive foam disc with Mylar[®] cover ensures skin temperature readings are accurate by reflecting heat generated by radiant warmers
- Thermistor indented into adhesive foam disk minimizes trauma to sensitive skin



A wide range of types and sizes available

Anatomical Probes	Cable Sensor Series			
	Thermocouple	400 Series	700 Series	70S Series
Esophageal Stethoscope	X	X	X	X
General Purpose (Esophageal/Rectal)	X	X	X	X
Skin	X	X	X	X
Tympanic	X	X		X
Foley		X		
Myocardial	X	X		



Committed to your professional growth.



As the pace of new medical procedures and technologies increases, it's important to stay current. At Smiths Medical, we understand how important this is. That's why we offer a wide variety of clinical education programs as well as other learning activities that are designed to help you better help your patients.

Clinical Education

Smiths Medical is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

We're proud to sponsor learning activities in a variety of formats to enhance your professional development.

HEAT_{TQM}[®]

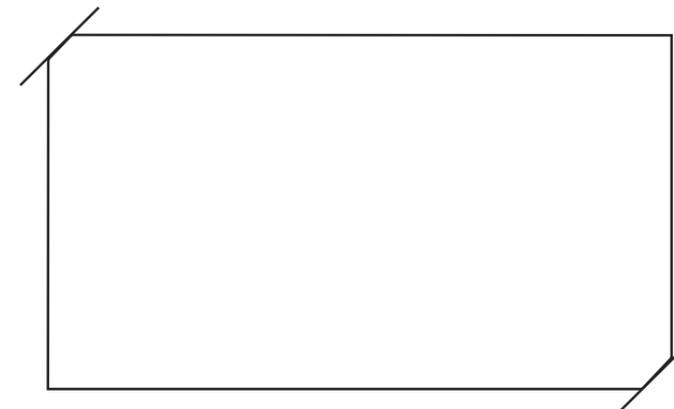
The Hypothermia Process Improvement Program for Total Quality Management (HEAT_{TQM}[®]) is our comprehensive, step-by-step process improvement program designed to reduce the incidence of inadvertent hypothermia in the perioperative setting. This program, facilitated by Smiths Medical representatives, includes written documentation, education, and the onsite assistance necessary to ensure success. The HEAT_{TQM}[®] program supports compliance with accreditation organizations and HIPAA requirements. Other features include:

- Tools for collection and evaluation of baseline post-operative admission temperatures
- Continuing Education Program presenting causes, risks and costs of inadvertent hypothermia along with the appropriate treatment modalities
- Program awards contact hours for Nursing Continuing Education
- Post-intervention data collection and analysis tools
- Documentation of process and improvements

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For more information, call your Smiths Medical representative
or visit us at www.smiths-medical.com.



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Not all products available in all markets.

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