Thermogard HQ™ | Temperature Management System

Technical Specifications

ZOLL's new Thermogard HQ Temperature Management System combines the speed, precision, and clinical intelligence you need to manage the core temperature of your critically ill patients with "set-up-and-go" efficiency.

Thermogard HQ provides reduced variability and easy-to-access data, simplifying high-quality temperature management and streamlining the path to better patient care.

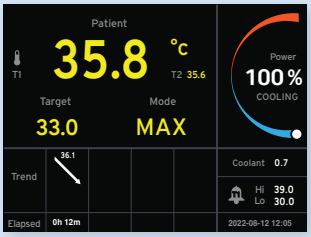
Thermogard HQ combines precise temperature management with the critical care functions of a standard central venous catheter (CVC).

Cool or warm saline circulates through the catheter in a closed loop, quickly cooling or warming the patient as venous blood passes over the balloons, without infusing saline into the patient.

Experience the benefits of the Thermogard HQ

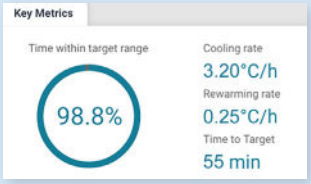
- Rapid and precise core body temperature management
- Delivers up to 3.6°C per hour cooling rates, often reaching target temperature in under an hour
- A complete family of multifunction catheters provides flexibility in power and placement site
- System automatically maintains target temperature within ±0.2°C[1]
- Eliminating the need for skin checks reduces workload by as much as 74%, making it nursing-efficient[2]
- Speed metrics on-screen let you monitor performance at a glance
- Temperature management is now integrated via Wi-Fi into the ZOLL RescueNet® CaseReview system to support quality assurance and improvement

ZOLL®



Console Interface

View current patient and system data on the display or synchronize with your hospital monitor.



RescueNet™ CaseReview for Temperature Management

Access retrospective patient vitals and console data online to support quality improvement initiatives.

Start-up Kit

Tubing set, heat exchange coil, air trap, and roller pump tubing

Dimensions

Height: 45 in (114 cm)

Width: 17 in (43 cm)

Depth: 30 in (76 cm)

Weight: 115 lbs (52 kg)

Electrical Configuration

100-120 VAC, 50/60 Hz, 6A

220-240 VAC, 50/60 Hz, 3A

Voltage: 115 V, 230 V

Fuse Protection:
T6.3A (slow blow) 5 x 20 mm

Environmental

Operating Temperatures:
10°C – 27°C (50°F – 81°F)

Operating Humidity:
30 to 75% noncondensing

Atmospheric Pressure:
70 kPa to 106 kPa

Chiller and Heater

Reservoir Volume:
2.0 liters (0.5 gal)

Pump Capacity:
7 lpm at 0 m head (0 ft)

Temperature Range:
0°C – 42°C

Refrigerant: RFC 134a

Controller and Display

Screen Display:
6.4 in. (16.25 cm) LCD color VGA

Controls:
Push buttons and knob

Temperature Input:
Thermistor, YSI-400 series

Articulation:
180° swivel, 45° tilt

Data Interface:
Digital output using RJ45

The USB port accepts a FAT32-formatted USB drive with equal to or less than 32 GB capacity.

Wi-Fi is available for CaseReview

Alarms:
Audible tones and displayed text messages

Displayed Temperature Range:
26°C – 42°C

Displayed Temperature Accuracy:
± 0.2°C

Saline Coolant Circuit

Priming Volume: 200 ml

Heat Exchanger: Disposable stainless steel coil

Priming Source: Sterile saline solution (hospital provided)

Patient Connection: Directional Luer connections on 72-in. (183-cm) lines

Pump tubing: Roller pump compatible with directional fittings

Sterility: Gamma sterilized

Saline alarm: Reservoir-level detection and alarm system

Coolant Circuit Operating Life: Replace disposable components after seven (7) days of continuous use

Equipment Classifications

Type of Protection Against Moisture: Ordinary

Type of Protection Against Electric Shock: Type BF for temperature inputs Type B for catheter connections

Protection Class: 1

Mode of Operation: Continuous

Approved Patient Temperature Probes

Temperature Probe Standard:
YSI-400 and 4400

YSI-400 and 4400 temperature probes verified to work with the system:

C.R. Bard Foley Catheter, BARDEX, 8F

C.R. Bard Foley Catheter, BARDEX, 12F

C.R. Bard Foley Catheter, LUBRI-SIL, 14F

C.R. Bard Foley Catheter, LUBRI-SIL, 16F

C.R. Bard Foley Catheter, LUBRI-SIL, 18F

Covidien Foley Catheter with Temperature Sensor, 8F

Covidien Foley Catheter with Temperature Sensor, 10F

Covidien Foley Catheter with Temperature Sensor, 12F

Covidien Foley Catheter with Temperature Sensor, 14F

Covidien Foley Catheter with Temperature Sensor, 16F

Covidien Foley Catheter with Temperature Sensor, 18F

Covidien General Purpose Probe, 9F

Smith Medical Foley Probe 10 FR (600244-001)

Smith Medical Foley Probe 12 FR (600224-002)

Smith Medical Foley Probe 14 FR (600224-003)

Smith Medical Foley Probe 16 FR (600224-004)

Smith Medical Foley Probe 18 FR (600224-005)

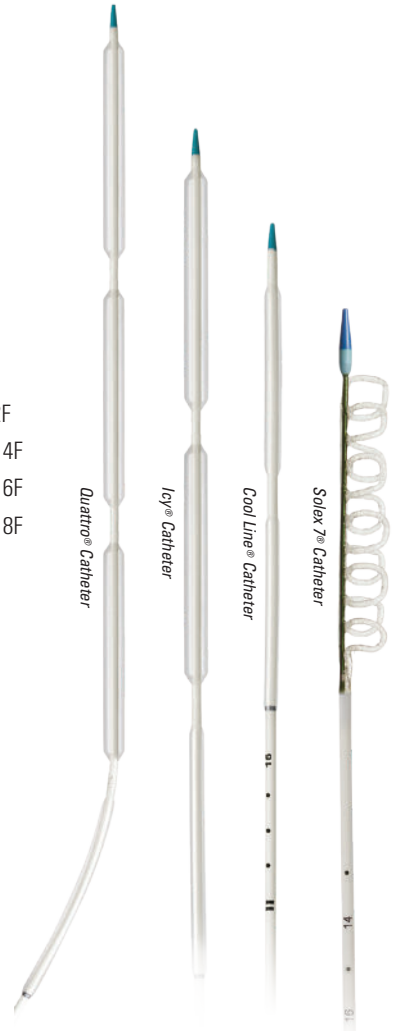
Smith Medical GP/Rectal Probe 9 FR (600225-001)

Smith Medical GP/Rectal Probe 12 FR (600225-002)

YSI-400 Temperature probes verified to work with the system and Rüsch Patient Interconnection Cable – Rüsch P/N 179516

Rüsch Sensor Temperature Foley Catheters (CH 8, 10, 12, 14, 16, 18) – Rüsch P/N 179360

Rüsch Temperature Supracath (CH 10, 12, 14) – Rüsch P/N 179370



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[1]Hoedemaekers CW, et al. *Critical Care.* 2007;11:R91.
[2]Maekawa T., et al. *Therapeutic Hypothermia and Temperature Management Journal.* 2020;10(3): 179-185.

Specifications subject to change without notice.
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Printed in U.S.A. MCN TP 2203 0308

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