

Thermogard XP Temperature Management System Specifications

ZOLL's Thermogard XP® (TGXP) Temperature Management System provides the power and control you need to rapidly, safely, and effectively manage the core body temperature of critically ill or surgical patients.¹⁻⁴

ZOLL 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 XP

- Rapid and precise core body temperature management
- System automatically maintains target temperature within $\pm 0.2^{\circ}\text{C}$
- Easy-to-use
- Multifunction catheters double as a central venous catheter (CVC); adding vital capability to a line that is already being placed.
- Software enables real-time temperature display, storage, and download
- Reduces nursing workload by 74%⁵; no constant monitoring of temperature, managing shivering, checking pads, etc.
- Unhindered patient access



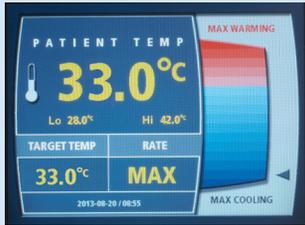
¹ Mayer SA, et al. Critical Care Medicine. 2004;32(12):2508-2515.

² Diringier MN, et al. Critical Care Medicine. 2004;32(2):559-564.

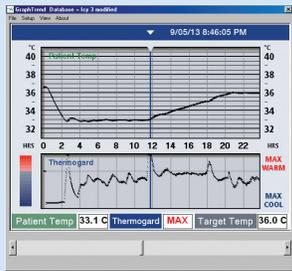
³ Hoedemaekers CW, et al. Critical Care. 2007;11:R91.

⁴ Heard KJ, et al. Resuscitation. 2010;81:9-14.

⁵ ICEREA Deye N, et al. Circulation. 2015;132:182-193.



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



Track patient and system data and electronically transfer to the patient's file.



Start-up Kit

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

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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, 5A
220-240 VAC, 50/60 Hz, 2.25A
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: HFC 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:
Serial RS-232C, 9-pin
sub-D connector
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

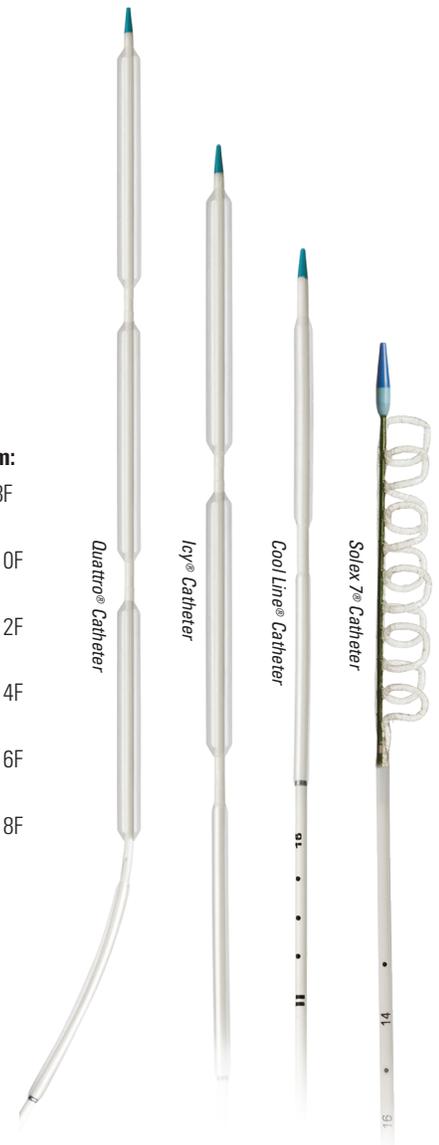
Equipment Classifications

**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
**YSI-400 temperature probes
verified to work with the system:**
Mallinckrodt Medical Foley Probe 8F
(200818-001)
Mallinckrodt Medical Foley Probe 10F
(200818-002)
Mallinckrodt Medical Foley Probe 12F
(200818-003)
Mallinckrodt Medical Foley Probe 14F
(200818-004)
Mallinckrodt Medical Foley Probe 16F
(200818-005)
Mallinckrodt Medical Foley Probe 18F
(200818-006)
Mallinckrodt Medical GP/Rectal
Probe 9F (200820-001)
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



Specifications subject to change without notice.

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