



The **Medtronic Performer CPB** System, hereafter referred to as the Performer CPB, is an electromechanical extracorporeal support device used during cardiopulmonary bypass procedures. It is an integrated console that can provide total circulatory support of the cardiopulmonary system using the Medtronic® Bio-Pump® Centrifugal Blood Pump.

Features

- Temperature monitoring using YSI Series 400 probes for 8 temperatures.
- Flow monitoring for the arterial line using a reusable Transonic ultrasonic flow probe.
- Oxygen saturation and hematocrit monitoring using an opto-electric sensor.
- Timers for the pump time, clamp time, and cardioplegia delivery times and intervals.
- Air Bubble Detection (ABD) of macro-air in the arterial circuit.
- Air Bubble Detection (ABD) of macro-air in the cardioplegia circuit.
- Active Air Removal (AAR) technology.
- Level detection utilizes a pair of level sensors to monitor changes in fluid or blood volume in the reservoirs.
- 12.1 In color touch screen display.



Specifications

Physical

Width: 19.6 In (50 cm)
Depth: 22 In (56cm)
Height: 39.4 In (100 cm) - 55.1 In (140 cm)
Weight: Approx. 198 lbs (90 kg)

Environmental

Operating Conditions

Temperature: 50°F - 104°F (10°C - 40°C)
Humidity: 30% - 75% Non-condensing Relative Humidity
Atmospheric Pressure: 700 -1060 mBar

Transport and Storage Conditions

Temperature: -4°F - 140°F (-20°C - 60°C)
Humidity: 10% - 90% Non-condensing Relative Humidity
Atmospheric Pressure: 700 - 1060 mBar

Electrical Data

Classification (as for EN60601-1): Class I, type BF

Operation Mode: Continuous

Voltage: 100 to 240 VAC \pm 10%

Frequency: 50 to 60 Hz \pm 10%

Current: max. 6 A (100 to 120V); max. 3 A (220 to 240V)

Power Absorption: max. 600 VA

Earth Leakage Current: < 300 μ A

Patient Leakage Current: < 100 μ A

Ingress Protection(IP code as for IEC 60529): IP 21: protected against solid foreign objects of 12 mm diameter and greater; protected against drop water.

Pump PM1

Unidirectional peristaltic pump with manual operating system

Flows: Up to 3.7 L/min (9.5 mm (3/8 in) pump segment); Up to 3.7 L/min (6.4 mm (1/4 in) and 6.4 mm (1/4 in) pump segments); Up to 1.8 L/min (6.4 mm (1/4 in) pump segment)

Maximum tolerance: \pm 10%

Pressure Range Within Tolerance: -150 to +500 mm Hg

Protection system: Feedback with rotation signal detected on the encoder; Open-cover sensor (and subsequent pump blockage).



Specifications

Pump PM2

Unidirectional peristaltic pump with manual operating system

Flows: Up to 1.5 L/min (9.5 mm (3/8 in) pump segment); Up to 1.5 L/min (6.4 mm (1/4 in) and 6.4 mm (1/4 in) pump segments); Up to 0.8 L/min (6.4 mm (1/4 in) pump segment)

Maximum tolerance: $\pm 10\%$

Pressure Range Within Tolerance: -150 to +500 mm Hg

Protection system: Feedback with rotation signal detected on the encoder; Open-cover sensor (and subsequent pump blockage).

Pump PM3

Unidirectional peristaltic pump with manual operating system

Flows: Up to 0.6 L/min (6.4 mm (1/4 in) pump segment); Up to 0.16 L/min (3.2 mm (1/8 in) pump segment)

Maximum tolerance: $\pm 10\%$

Pressure Range Within Tolerance: -150 to +500 mm Hg

Protection system: Feedback with rotation signal detected on the encoder; Open-cover sensor (and subsequent pump blockage).

Pump PM4

Unidirectional peristaltic pump with manual operating system

Flows: Up to 1.1 L/min (6.4 mm (1/4 in) and 6.4 mm (1/4 in) pump segments); Up to 0.7 L/min (6.4 mm (1/4 in) and 3.2 mm (1/8 in) pump segments); Up to 0.6 L/min (6.4 mm (1/4 in) pump segment)

Maximum tolerance: $\pm 10\%$

Pressure Range Within Tolerance: -150 to +500 mm Hg

Protection system: Feedback with rotation signal detected on the encoder; Open-cover sensor (and subsequent pump blockage).

