

ABOUT

The **Belmont Medical Allon System** is used for non-invasive patient temperature management during surgery and recovery. It maintains stable core body temperature with a water-based heat pump and a closed-loop circulation system that connects to a single-use ThermoWrap garment. The system helps prevent hypothermia or overheating without disturbing laminar airflow in the operating room.

FEATURES

- **Perioperative Support:** Controls patient temperature before, during, and after surgery for continuous care from admission through recovery.
- **Conductive Warming System:** Uses circulating water and Peltier heat exchangers instead of forced air, reducing the chance of airflow disruption and possible contamination.
- **Dual Temperature Channels:** Monitors both core and surface temperatures through two separate sensors for accurate readings.
- **Touchscreen Display:** 5.7-inch color screen shows real-time temperature graphs, system information, and control settings.
- **ThermoWrap Garments:** Single-use garments available in multiple sizes (Infant to Adult/ Cardiac) cover up to 80% of the body without blocking surgical access.
- **Temperature Control:** Built-in algorithms adjust heating and cooling to maintain the set temperature range.
- **Data Logging:** CliniLogger™ function stores temperature and system data for later review.



SPECIFICATIONS



DIMENSIONS

Cardiac Output Module

- **Width:** 1.4 in (36mm)
- **Height:** 4.1 in (103.5 mm)
- **Depth:** 4.3 in (110 mm)
- **Weight:** 225 g (7.9 oz)

Spirometry Module

- **Width:** 1.4 in (36mm)
- **Height:** 4.1 in (103.5 mm)
- **Depth:** 4.3 in (110 mm)
- **Weight:** 250 g (8.8 oz)

SpO2 Module

- **Width:** 1.4 in (36mm)
- **Height:** 4.1 in (103.5 mm)
- **Depth:** 4.3 in (110 mm)
- **Weight:** 200 g (<8.8 oz)

TEMPERATURE RANGE

Operating: 0 – 40° C (32 – 100° F). When charging the battery, or M3002A is mounted on the back, or with Smart Hopping Interface 0 – 35°C (32 – 95°F)

Storage: -20 – 60° C (-4 – 140° F)

POWER SPECIFICATIONS

Power Consumption: <70 W average

Line Voltage: 100 – 240 V

Current: 1.2 – 0.5 A

Frequency: 50/60 Hz

HUMIDITY RANGE

Operating: 15% to 95% Relative Humidity (RH) (noncondensing)

Storage: 5% – 95% Relative Humidity (RH)

ALTITUDE RANGE

Operating: -500 – 3000 m (10000 ft)

Storage: -500 – 4600 m (15000 ft)

DISPLAY SCREEN

Size: 15 inch

Type: 390 mm active matrix color LCD (TFT)

Resolution: 1280 x 768

Refresh rate: 59.9 Hz

Useful screen: 334.1 x 200.5 mm

Pixel Pitch: 0.261 x 0.261

NETWORK

Standard: 10BASE-T and 100Base-TX (IEEE 802.3), auto-negotiation, full and half-duplex

Connector: RJ45 (8-pin)

Isolation: basic insulation (reference voltage: 250 V; test voltage: 1500 V)

USB INTERFACE

Standard: USB 2.0 high-speed

Connector: USB series "Standard A" receptacle

Power: Low power port 4.4 V min., max. load for all ports together 500 mA

Isolation: none

SPECIFICATIONS



VIDEO INTERFACE

Connector: DVI-I (digital and analog, single link).

Digital Video Connector: single link TMDS

Analog video signals: 0.7 Vpp@75Ω

HSYNC/VSYNC signals: TTL

BATTERY OPERATING TIME

New and fully loaded battery

With basic monitoring configuration: 2.5 hours
(brightness set to optimum, MMS connected, NBP measurement every 15 minutes)

With extended monitoring configuration: 2 hours
(brightness set to optimum, MMS and MMS extension connected, NBP every 15 minutes, Recorder, Pressure, and Temperature modules connected)

BATTERY CHARGE TIME

When the monitor is switched off: 3 hours

When the monitor is in use: up to 5 hours, depending on monitor configuration