



The Arctic Sun Temperature Management System is a thermoregulatory device that monitors and controls patient temperature within a range of 32°C to 38.5°C (89.6°F to 101.3°F). The Arctic Sun System consists of the Model 2000 and disposable ArcticGel Pads. The Model 2000 consists of the Control Module, Remote Display, Fluid Delivery Line, cables and accessories.

The Model 2000 pulls temperature-controlled water ranging between 4°C and 42°C (39.2°F and 107.6°F) through the ArcticGel Pads at approximately 0.7 liter per minute per pad. This results in heat exchange between the water and the patient. Unlike conventional water based systems, this system operates under negative pressure relative to ambient. Any break or leak in the system will result in air entering the circuit instead of water leaking out.

The system functions in either an Automatic Mode or Manual Mode. In Automatic Mode, a patient temperature probe, connected to the Control Module, provides feedback to an internal control algorithm. The temperature of the water increases or decreases automatically to achieve a pre-set patient target temperature determined by the clinician. In Manual Mode, the feedback control algorithm is not activated. The operator adjusts the temperature of the water delivered to the pads directly and is responsible for monitoring patient temperature.

