

BH2100 SMART CONTROLLER

The S1 is a single-circuit IoT heat trace controller for use in snow melting, freeze protection, and temperature maintenance applications. The cloud connection enables advanced monitoring and notification of your heating system.

Features & Benefits

- ▶ WeatherWizard Technology activates heating system only when needed – can reduce energy costs by over 20%
- ▶ Access and monitor your heating system in the Cloud from anywhere, 24/7 – through Wi-Fi, Ethernet, or Cellular
- ▶ Building maintenance systems (BMS) integration through Modbus or BACnet
- ▶ Customized SMS and email notification alerts
- ▶ Current and temperature alarm configurations
- ▶ Thermistor or RTD for local temperature sensing
- ▶ Fire protection mode bypasses ground fault protection
- ▶ Dry contact for alarm output
- ▶ Double-pole relay allows for 240 VAC with 2 hot legs
- ▶ Designed for outdoor use with IP67 rating

Specifications

Voltage: 120–277 VAC, 50/60 Hz

Maximum Amp Load: 30 amps AC resistive

Temperature Control Range: 0°F to 300°F (-18°C to 149°C)

Hysteresis: 1°F to 35°F (-17°C to 2°C)

Temperature Display Units: °F and °C

Sensor Input: 19 ft long thermistor (included) or 3-wire RTD (PT100)

Accuracy: ±1% @ -40°C to 105°C

Alarm: LED and dry contact (NC 2-amp at 250 VAC)

Ground Fault Trip Level: 30–300 mA

Dry Contact Alarm: Normally closed, or open on alarm (contacts rated for 2 amps max at 250 VAC, 14–24 AWG)

Communications:

- S1-A: Wi-Fi 802.11 dual band 2.4 GHz & 5 GHz; ethernet RJ45 Cat 5 or 6
- S1-C: Cellular only
- TIA/EIA 485 (RS-485) Modbus (isolated 3-wire 2x signal w/GND, 14–24 AWG)
- BACnet IP & MS/TP via preconfigured SMC Gateway

Input/Output Connections: Screw terminals for 10–18 AWG wire

Environmental Exposure:

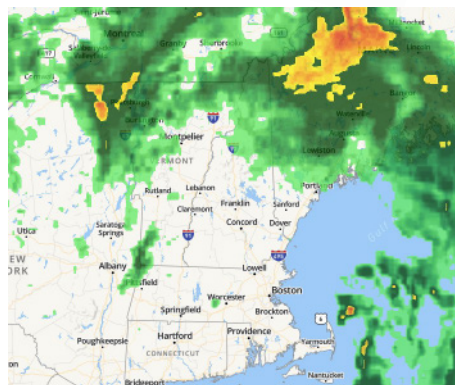
- Operating Range: -22°F to 158°F (-30°C to 70°C)
- IP Rating: IP67

Enclosure Dimensions: 6.3 in H x 3.7 in D x 7.6 W
(160 mm H x 92 mm D x 192 mm W)



NEW!

Easy mounting options



Link to weather data in your local area