Applying the proper charge voltage is critical for achieving optimum battery performance and longevity. The ideal charge voltage required by batteries changes with battery temperature. The battery temperature sensor allows the charge controller to continuously adjust charge voltage based on actual battery temperature. Temperature compensation of charge voltage assures that the battery receives the proper charge voltage as battery temperature changes during normal operation.

The graph above shows how the Solar Boost 3024i would use the temperature sensor to adjust charge voltage to the required value based on battery temperature. With out temperature compensation charge voltage would be too low at low battery temperatures leading to chronic under charging and battery damage due to sulfation. At high battery temperatures charge voltage would be too high leading to excessive water loss and undue degradation of the positive plate. Both of these conditions can impair battery performance and shorten battery life.

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### Battery Temperature Sensor

- **Battery Temperature Sensor Improves Charge Control and Battery Performance.**

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### Battery Temperature Sensor Specifications

- **Accuracy**: ±1.0°C @ 25°C • ±2.5°C over full range
- **Temp. Range**: -40 – +100°C
- **Cable**: 18awg 105°C PVC
- **Cable Length**: 20 feet (6.1m)
- **Sensor To Housing Breakdown Voltage**: 150VDC Minimum
- **Lug Mounting Hole**: 0.400” (1.02cm) Nominal Diameter

As a part of our continuous improvement process specifications are subject to change without prior notice.

### Part Number & Shipping Weight

- **Temp sensor, 20’**: 930-0022-20 • 1 lbs • 0.45kg

### Available From:

2598 Fortune Way, Suite K • Vista, CA 92081, USA

800-493-7877 • 760-597-1642 • Fax 760-597-1731

www.blueskyenergyinc.com

Covered under one or more of the following US Patents:

6,111,391 • 6,204,645