

## **Temperature Sensor**

## Accurate. Reliable. Simple.



### Advanced Industrial Monitoring | Versatile Sensors | Reliable Safety

**Effortless Operation:** Seamlessly collect accurate data across a variety of sensors.

Adaptable Design: Measure critical parameters with precision and extended recording capabilities.

**Insightful Analytics:** Transform data into actionable insights for smarter operations.

**Enhanced Asset Management:** Monitor key events such as temperature, pressure, vibration, and shock for improved reliability.

Thermocouples are very sensitive, requiring electronics capable of handling their signals and providing temperature compensation. The Holdstein Temperature Sensor does all of this for you and can be easily integrated into any system in your company or industry. Compatible with virtually any type of thermocouple.

The Temperature Sensor supports types K, J, T, N, S, E, B, and R!





#### Mechanical Specifications:

Mass: 20 grams

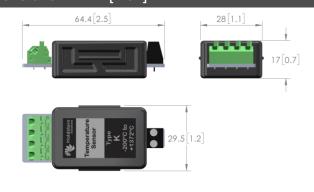
Housing Material: Ultra-Resistant Nylon with UV Protection

Mounting Type: SnapBase® Locking System, PN HS112GA001006

**Length:** 64.4 mm (2.5 in) **Width:** 29.5 mm (1.2 in) **Height:** 20 mm (0.79 in)

Ingress Protection: Up to IP 68 (With Enclosure). IP 50 (Sensor Only).

#### Dimensions in mm [inch]:



# Exploring Continuous Temperature Monitoring with the Sensor Recorder and Gateway

In today's dynamic world, where companies are focusing on predictive maintenance, monitoring temperature variations is essential to prevent equipment failures, minimize unplanned downtime, optimize performance, and reduce costs. Unlike conventional methods that provide isolated readings, the Holdstein Solutions Temperature Sensor, combined with the Sensor Recorder and Gateway, enables continuous temperature data collection, creating a detailed "thermal identity" over time. Here's why this is innovative:

#### **Pattern Identification**

The Holdstein Solutions Temperature Sensor captures temperature variations and patterns over time, allowing the recording of fluctuations that would go unnoticed in short-term measurements. This deep insight enables more precise operational adjustments and temperature control.

#### **Robust Predictive Analysis**

The extensive temperature data collected enables advanced predictive analysis techniques. Anticipate potential failures, minimize downtime, and significantly reduce repair costs through accurate temperature insights.

#### **Comprehensive Historical Documentation**

With a detailed historical record of temperature behavior, you can compare past and present conditions, understand equipment performance over time, and plan maintenance with greater precision.

#### **Early Anomaly Detection**

With continuous temperature monitoring, it is possible to detect anomalies and trends that indicate imminent issues. This allows you to act before a problem escalates, ensuring greater reliability and extending the lifespan of critical equipment.

Holdstein Solutions aims to transform the way industries monitor and maintain their assets. Invest in continuous temperature monitoring with the Holdstein Solutions Temperature Sensor, and discover how we can help your company reach new levels of efficiency, precision, and safety.

#### Partial General Specifications. Visit our website for more information:

#### Wide Thermocouple Compatibility

Supports multiple thermocouple types, making it suitable for diverse applications.

#### Temperature Range:

Type K: -200°C to +1372°C

Type J: -150°C to +1200°C

Type T: -200°C to +400°C

Type N: -150°C to +1300°C

Type E: -200°C to +1000°C

Type S: +250°C to +1664°C

Type B: +1000°C to +1800°C

Type R: +250°C to +1664°C

The Adafruit MCP9600 is a highly integrated thermocouple amplifier designed to interface seamlessly with various thermocouple types, including K, J, T, N, S, E, B, and R. It simplifies temperature measurements by handling the analog-to-digital conversion and cold-junction compensation internally, providing accurate temperature readings over an I2C interface.

#### High Resolution:

Offers a resolution of ±0.0625°C, ensuring precise temperature measurements.

#### Applications:

Industrial Process Control: Ideal for monitoring and controlling temperatures in industrial settings.

HVAC Systems: Suitable for precise temperature measurements in heating, ventilation, and air conditioning systems.

Ovens and Cooktops: Ensures accurate temperature monitoring in cooking appliances.

Laboratory Equipment: Provides reliable temperature readings for scientific research and experiments.



Holdstein Solutions is a emerging Canadian company committed to advancing technology and its practical implementation in the industry. With a strong focus on research and development, we strive to deliver cutting-edge integrated software and hardware solutions that are both innovative and dependable. Our extensive expertise in the deep water oil & gas industry has enabled us to develop top-quality products over the years. Trust Holdstein Solutions for advanced technology solutions tailored to your industry needs.

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