



# SUTRON SDI-12 AquaTemp Submersible Temperature Sensor Instruction Manual

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## SUTRON SDI-12 AquaTemp Submersible Temperature Sensor



### Product Information

#### Specifications

- Confidential – Company Proprietary

### Product Usage Instructions

## **Unpacking and Setup**

Before using the product, follow these steps:

1. Remove the product from its packaging.
2. Check for any visible damage. If damaged, contact customer support.
3. Find a suitable location to place the product.
4. Ensure the product is connected to a power source.

## **Powering On the Product**

To power on the product, follow these steps:

1. Locate the power button on the product.
2. Press and hold the power button for 3 seconds.
3. The product will start up and the LED indicator will turn on.

## **Product Configuration**

To configure the product, follow these steps:

1. Connect the product to your computer using the provided USB cable.
2. Install the product configuration software on your computer.
3. Launch the configuration software and follow the on-screen instructions.
4. Customize the settings according to your preferences.
5. Save the configuration and disconnect the product from your computer.

## **Product Maintenance**

To ensure optimal performance, perform regular maintenance on the product:

1. Clean the product surface with a soft, dry cloth.
2. Avoid using harsh chemicals or abrasive materials.
3. Keep the product away from direct sunlight and extreme temperatures.
4. Regularly check for software updates and install them as necessary.

## **troubleshooting**

If you encounter any issues with the product, try the following troubleshooting steps:

1. Restart the product and see if the issue persists.
2. Check the product's user manual for specific troubleshooting guidelines.
3. Contact customer support for further assistance.

## **Frequently Asked Questions (FAQ)**

**Q: How do I reset the product to factory settings?**

A: To reset the product to factory settings, follow these steps:

1. Power off the product.
2. Press and hold the reset button for 10 seconds.
3. The product will reset and all settings will be restored to default.

**Q: Can I use the product with multiple devices?**

A: Yes, the product can be used with multiple devices. Simply connect it to each device using the appropriate cables or wireless connections.

**Overview**

Sutron's AquaTemp submersible temperature sensor is a rugged SDI-12 sensor designed to measure the temperature of water, soil, and other liquids. The SDI-12 interface, high accuracy, and long-term reliability make it easy to add temperature monitoring to existing stations.



Aqua Temp-x ("" determines cable length)

**Applications**

- Soil Temperature
- Streams
- Surface Water
- Stilling Wells
- Dams
- Aquaculture Tanks



## Features

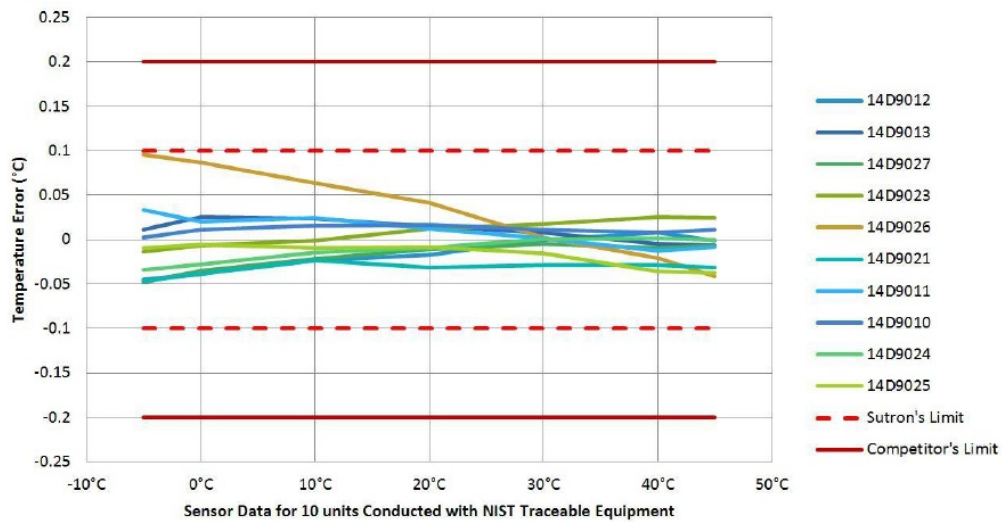
- SDI-12 Operation (V1.3)
- Tough UV-resistant, watertight polyurethane cable
- Stainless steel body with eyelet for weight or pull strings
- Flex fitting to protect cable
- Wide operating temperature range (-40° to +60°C)

**EXCEPTIONAL ACCURACY  $\pm 0.1^{\circ}\text{C}$  (-5° TO +45°C)**



## Accuracy Comparison

### AquaTemp Performance of 10 units (-5°C to +45°C)



## Specifications

<b>SPECIFICATIONS</b> <i>Specifications subject to change without notice</i>	
Measurement Interval	1 second to 24 hours
Units	Celsius, Fahrenheit
High Accuracy Temperature Sensor	±0.1°C (-5 to +45°C)
Temperature Resolution	0.01°C
Operating Range	-40 to +60°C
Quiescent Current	< 0.1 mA
Active Current	<5 mA
Input Voltage	7-16V
SDI-12 Operation	V1.3
Tough UV resistant polyurethane cable with waterblock	60 ft. standard
Diameter	0.63 inch
Device is capable of fitting through a standard 1 inch conduit with 8 inch factory bend corner	

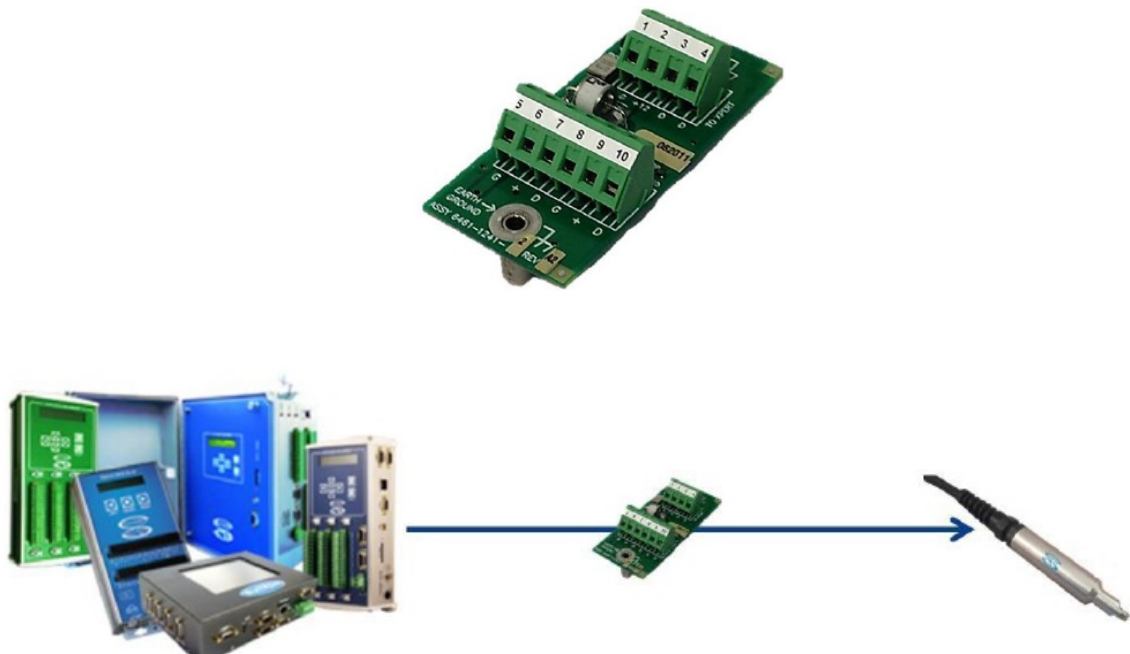
## Models & Options

ORDERING	
Part Number	
AquaTemp-x	AquaTemp Submersible SDI-12 Temperature Sensor
Calibration Certificate	Optional add-on (Unit is calibrated with NIST traceable equipment)
X in the part number represents the number of feet of cable needed: 60, 100, 150, 200, 300 or any custom size the application requires. It is not recommended to go beyond 300 feet.	



## Recommended Accessories

SDI-12 Surge Protection Module (6461-1241) Although the AquaTemp is built with SDI-12 surge protection, Sutron recommends additional security through the SDI-12 Surge Protection Module.



- Multi-stage circuitry: Automatically resets after a surge
- Operating temperature:-40°C to +60°C
- Accepts wire sizes (input/output):26-14 AWG
- Series resistance (Analog 1/0):100 ohms
- Power handling:(8/20 uS) 20 kAmps
- Clamping voltage:36 V

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## Documents / Resources



[SUTRON SDI-12 AquaTemp Submersible Temperature Sensor](#) [pdf] Instruction Manual  
SDI-12, SDI-12 AquaTemp Submersible Temperature Sensor, AquaTemp Submersible Temperature Sensor, Submersible Temperature Sensor, Temperature Sensor, Sensor

## References

- [User Manual](#)