

# T-Node Quick Start Guide

This guide will help you get started. Detailed instructions are available in the NexSens T-Node manual.

## Overview

The NexSens T-Node water temperature sensor features an integral digital sensor secured in a protective housing for underwater deployments in fresh, brackish, or seawater. The sensors can be connected in series using UW underwater cables and suspended vertically in a water column or horizontally along a stream or riverbed. Double o-ring seals ensure a waterproof sensor connection.



## What's Included

- T-Node Temperature Sensor
- Calibration card

## Single-Point Temperature Sensor

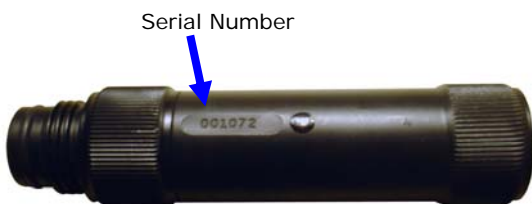
1. Confirm that both O-rings (side of the T-Node plug end and in bottom of receptacle) are free of debris and in location.
2. Connect the T-Node temperature sensor to the UW cable and plug the other end with the UW-PLUG.



## Multi-Point Temperature Sensors

Multiple T-Node sensors can be connected in-series to create a temperature string.

1. Select and lay out a number of T-Nodes and UW cables on a clean lab bench.
2. Arrange the T-Nodes starting with the lowest serial number near the data logger.



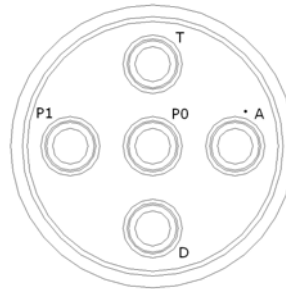
3. Connect the sensors and cables to build a string. Be sure to follow the procedure above for proper sealing.

## Connecting to a Data Logger

T-Node sensors can be connected via UW cables to SDL500 data loggers or through the MS8-TNODE adapter to any iSIC data logger.

**SDL500 connection:** Connect to Port T unless the string consists of more than 14 elements or has a length greater than 15 meters; in this case connect a T-Boost to port P0 and place it in-line with the temperature string.

SDL500 Sensor Bulkhead Port Diagram



**iSIC data logger connection:** Connect the adapter to the string and then to the MS8 port on the iSIC data logger.



## iChart Software – Create a Project

Launch the software and select **File | New Project**. Follow the Setup Device Wizard to create a project file. The Wizard will automatically detect the string based on the low-to-high serialization as described above. Additional support is available in the iChart manual.

## Other Data Loggers

NexSens T-Node sensors may be connected to other data loggers that support 1-wire bus. Data loggers that support SDI-12 and Modbus RTU will require an iSIC data logger configured as a slave. Using the information included on the calibration card, each T-Node may be used in any SCADA system or other data loggers.

For more information see the online manual(s) [www.nexsens.com/knowledgebase/manual.htm](http://www.nexsens.com/knowledgebase/manual.htm)



1415 Research Park Drive  
Beavercreek, Ohio 45431  
937-426-2703  
[www.NexSens.com](http://www.NexSens.com)