

Water Temperature Sensor

⚙️ Description:

Omicron Sensing Inc manufactures water temperature sensors. This document shows the enclosures and temperature vs resistance curves for the standard sensors.



⚙️ Features:

The sensors employ precision interchangeable thermistors and RTD which are compatible with all the major building automation systems.

- Designed for temperature sensing in an HVAC and light industrial control applications
- Precision interchangeability eliminates the necessity for individual circuit calibration.
- Omicron is able to produce custom sensors in small volume at standard sensor pricing

There are several sensor element ranges to choose from, which guarantee compatibility with all popular DDC systems. The sensor elements are precision thermistors or platinum RTDs. Field calibration is not generally required. The probe is epoxy sealed to prevent moisture from migrating into the probe. Custom probe lengths, wire types and sensor elements are available for large OEM projects. Ask about our plastics & metal manufacturing capabilities for custom housings as well.

⚙️ Specifications:

Thermistor Accuracy	:	± 0.1°C
Platinum RTD Accuracy	:	± 0.2°C
Thermistor Range	:	-70°C to 150°C
Platinum RTD Range	:	-200°C to 300°C
Probe Material	:	Stainless Steel
Cable Properties	:	FT4, 80°C, 600V

⚙️ Installation:

Locate water temperature sensor at least a few pipe diameters downstream any heat or cooling source:

- A 1/2" NPT female pipe fitting is welded into the pipe. These fittings are usually supplied and installed by the piping trade under direction of the controls trade.
- Choose an orientation where any condensation will not collect, such as the top of a horizontal pipe section or at a 45° angle from horizon.
- Before threading the sensor into the well, deposit some thermal paste in the bottom of the well to improve heat conduction between the metal parts.
- The sensor is wired with two conductors, normally 18ga unshielded twisted pair.