

High Moisture Thermistor Temperature Sensor

Argus SEN-TN21-HM2 thermistor offers high stability, accuracy, and resolution for a variety of temperature sensing applications in wet or direct immersion applications.



Applications



The SEN-TN21-HM2 temperature sensor is designed for use in high moisture applications in place of standard TN sensors.

Typical applications include direct insertion into liquids as well as wet soils and substrates. The sensor is encased in a stainless-steel housing using a water proof potting compound designed to resist water and dissolved salts.

The sensor is supplied 21-foot leads.

Alternatives

For dry or moderately moist applications, use Argus **SEN-TN** series thermistors. Please refer to the Argus Data Sheet **SEN-TN** for details). A wide variety of other application-specific temperature sensors including thermocouples can also be connected to the Argus system.

Features

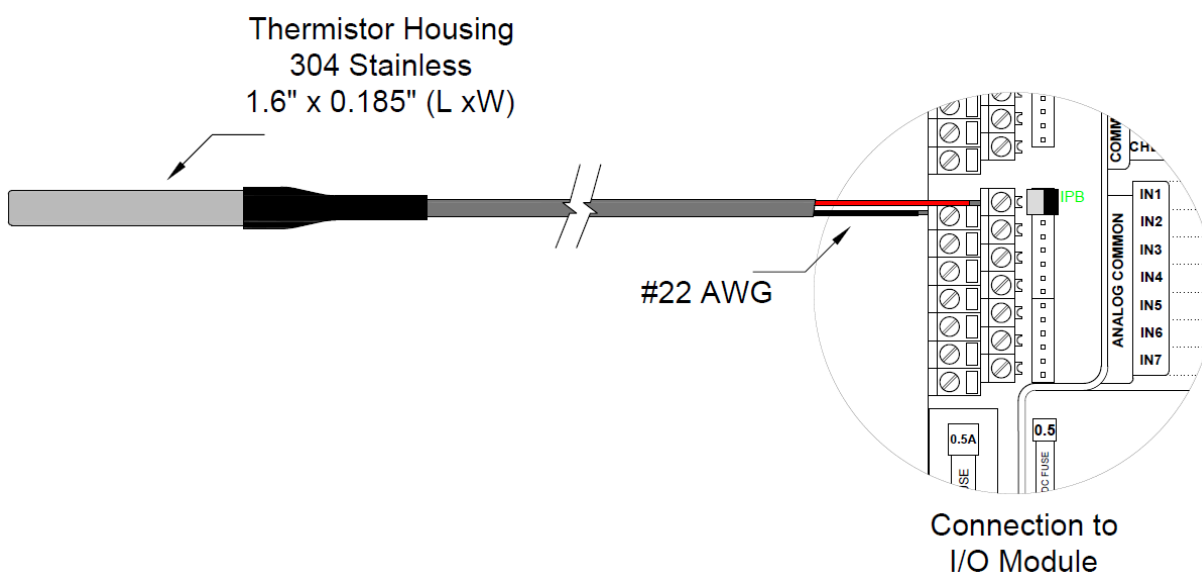
- **Wet Applications** – Water and salt resistant sensor enclosure.
- **Interchangeability** – Thermistors are matched to a standardized resistance/temperature curve to permit interchangeability with other thermistors using this curve without requiring calibration.
- **Accuracy** – Temperature measurement over an extensive range.
- **Minimal Signal Degradation** - TN thermistor sensors are minimally affected by wire resistance. Consequently, accurate measurements can be obtained from sensors located in satellite zones, far from the connected input module.

Specifications

Thermistor Type	NTC (Negative Temperature Coefficient)
Resistance	3,000 Ohms @ 25 °C Fenwal Unicurve (UUA Series)
Accuracy	± 0.2 °C over the range 0 °C to 70 °C ± 0.5 °C over the range -50 °C to 150 °C (accuracy degrades by 0.1°C for every 1000 ft. of 18 AWG field wire used)
Range Supported in Software	- 50 °C to 150 °C
Dissipation Constant	Still Air: 1.0 mW/°C Moving Air Stream: 1.7 mW/°C (for example, in aspirated housing) Immersed in Liquid: 8.0 mW/°C
Thermistor Housing	Construction: 304 stainless steel Dimensions: 1.6" x 0.185" (length x diameter)
Conductors	21 ft. of 22 AWG leads (heat shrink tubing included for splicing to field wiring)
Recommended Field Wire	2-conductor, 18 AWG UTP

* Due to short excitation times, dissipation constants not normally required when connected to Titan I/O Modules.

Wiring Details



Additional Information

For more information, please contact Argus.

