

# What is the supplied cable length of the TMP100 sensors; is it possible to extend the cable?

Maretron thermistor probes come with 6' long wires. Yes, you can extend Maretron TMP100 sensor wires to complete temperature sensing applications throughout a vessel.

In many applications technicians have extended thermistor wires up to 100 feet to measure temperatures in separate compartments throughout a vessel. When choosing to extend a thermistor temperature wire, calculate the resistance the wire will add to the measured resistance. Refer to Maretron article: [What temperature probes are compatible with Maretron's Temperature Monitor \(TMP100\)?](#)

For TMP100 channels 3-6, Maretron uses a  $3K\Omega @ 25^{\circ}C$  thermistor so you can extend the cable with an understanding that an error is introduced into the system as a function of the additional wire resistance.

The stock length of the cable is 10 feet or 3 meters.

## THERMISTOR

Maretron Part: TR3K



The image provided is a standard TR3K sensor with stock wire. The wire is designated as Alpha Wire H1 P/N1172C 2 conductor, 22AWG UL spec.

With supplied thermistor probe, Measurement Range – Thermistor  $-20^{\circ}\text{C}$  to  $80^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $176^{\circ}\text{F}$ )

With supplied thermistor probe, Measurement Accuracy – Thermistor  $\pm 2^{\circ}\text{C}$  ( $\pm 3.6^{\circ}\text{F}$ )

## THERMOCOUPLE

Maretron Part: TP-EGT-1



Note: Only two separate thermocouple probes can be used on a single TMP100 device (Channel 1: terminals 1 & 2, Channel 2: terminals 3 & 4).

Thermocouple wires can be extended using K-Type thermocouple wires with junction connections ONLY. Review length options with your local supplier. Figure 1 shows an example of a K-type Thermocouple extension wire with junction connections:

With supplied thermocouple probe, Measurement Range –  $+0^{\circ}\text{C}$  to  $700^{\circ}\text{C}$   
( $32^{\circ}\text{F}$  to  $1292^{\circ}\text{F}$ )

With supplied thermocouple probe, Measurement Accuracy –  $\pm 2^{\circ}\text{C}$  ( $\pm 3.6^{\circ}\text{F}$ )

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