TT002: Thermocouple Sensor

This technical tip shows how to connect a thermocouple to the ORB-X1. The ORB-X1 has a dedicated thermocouple input that is compatible with K, J, T, N, S, E, B and R-Type thermocouples.
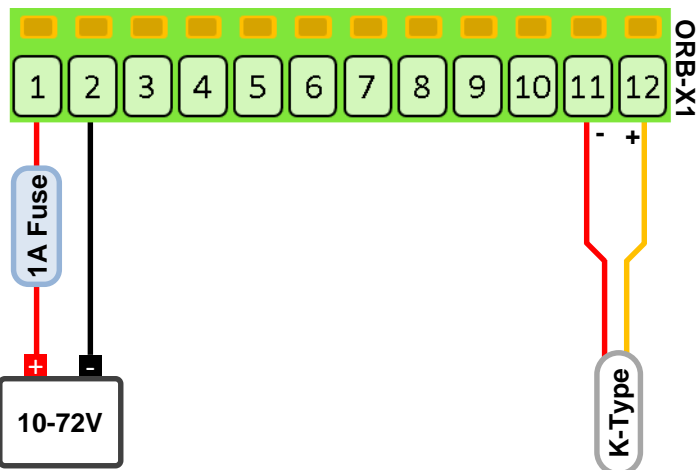
Note that the red wire on a thermocouple is often the negative terminal.

Sensor Parameters

Part Number	601-301
Type	K Type Thermocouple
Material	0.2mm dia solid or stranded PFA insulated twisted pair leads
Operating Range	-75ºC to +250ºC
Cable Length	2m
Supplied by	www.tcdirect.net.au

K-Type Thermocouple

ORB-X1

Setting (Thermocouple)	Value	Comment
Name	Water Temp	A meaningful name for the sensor data
Interval	1	1 means the sensor is sampled on every base interval
Hysteresis	2	The amount by which the temperature needs to change to exit warning or alarm
Type	K	The type of thermocouple
Warning	Enabled	A warning will be issued if the level goes outside limits
Low Warning	5	The levels below which a warning will be issued
High Warning	50	The level above which a warning will be issued
Alarm	Enabled	An alarm will be issued if the level goes outside limits
Low Warning	0	The level below which an alarm will be issued
High Warning	60	The level above which an alarm will be issued