

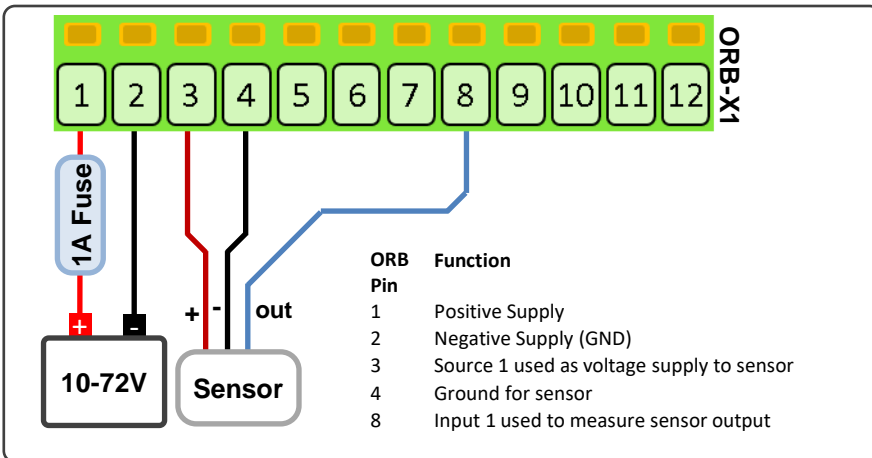
TT007: Voltage Out Wind Speed Sensor

This technical tip shows how to connect a voltage output wind sensor to the ORB-X1. The sensor is powered from one of the ORB current source outputs. It could alternatively be powered from the external battery. The voltage output from the sensor is measured with one of the ORB inputs.

Extensions: The ORB output could be used to drive an external warning beacon or siren. The current source could warn if the sensor is drawing no current, indicating a broken wire. There is an equivalent wind direction sensor that could be connected to Input 2 on the ORB.

Sensor Parameters

Part Number	RK100-01-B
Type	Wind Speed Sensor
Output	0-5V out
Calibration	0V to 5V = 0 to 30m/s
Operation	Starting threshold < 0.5m/s
Supplied by	Instrument Choice (www.instrumentchoice.com.au)



Setting (Input 1)	Value	Comment
Name	Helipad	A meaningful name for the sensor data.
Interval	1	1 means the sensor is sampled on every base interval.
Hysteresis	5m/s	The amount by which the temperature needs to change to exit warning or alarm.
Warning	Enabled	A warning will be issued if the level goes outside limits.
Low / High Warning	0 / 15	No low wind warning. Warning will be raised above 15m/s wind speed.
Alarm	Enabled	An alarm will be issued if the level goes outside limits
Low / High Alarm	0 / 20	No low wind alarm. Alarm will be raised above 20m/s wind speed.
Calibration Low In / Out	0 / 0	The datasheets specifies that 0V represents 0m/s.
Calibration High In / Out	5 / 30	The datasheets specifies that 5V represents 30m/s.
Calibration Unit	m/s	The unit of measure for wind speed is m/s.

Setting (Current 1)	Value	Comment
Name	Power for Wind Sensor	A meaningful name for the sensor data.
Interval	1	1 means the sensor is sampled on every base interval.
Always On	Disabled	To save power, we will only power the WeatherStation when required.
Start Time	30	Allow 30 seconds for the weather station to start before turning off power.