

# Sonar Phidget



For applications of spatial awareness and motion sensing, this handy Sonar Phidget is unmatched. It emits pulses of ultrasonic vibration at a rate of up to 10 pulses per second. After each pulse, it “listens” for ultrasonic waves that have reflected off of objects up to 10m away and sends them to your computer via the sensor update event. The Sonar Phidget can detect up to 8 reflections in a single pulse, and will report the approximate distance and strength of each reflected wave. The DST1200 connects to a port on a **VINT Hub**. See the “Compatible Products” tab for a list of hubs.

## Useful in Robotics

The Sonar Phidget can be used as an ultrasonic range finder. The distanceChange event automatically returns the distance of the strongest reflection whenever new data comes in. This mode is commonly used for obstacle detection in robotics projects.

## Product Specifications

### Sensor Properties

Sensor Type	Distance (Sonar)
Controlled By	VINT
Measurement Distance Min	40 mm
Measurement Distance Max	10 m
Measurement Distance Resolution	10 mm
Sampling Interval Min	100 ms/sample
Sampling Interval Max	60 s/sample

### Electrical Properties

Current Consumption Max	* 5.6 mA
Current Consumption Min	(unconfigured) 47 $\mu$ A

### Physical Properties

Operating Temperature Min	-40 $^{\circ}$ C
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Operating Temperature Max      85 °C

\* – Current consumption varies depending on the selected data interval and whether or not it is running in “quiet” mode. See the technical section of the User Guide for details.

**Errata:** The enclosure for the DST1200 may state the range as being 220mm to 10m, but it is actually 40mm to 10m, as listed in the specification table.