

# Sound Phidget



Measure sound pressure level of a room or an environment with this neat little Phidget that plugs into a **VINT port** (See the “Compatible Products” tab for a list of VINT Hubs). You could also use it to detect the occurrence of sudden noises. The sensor returns data in dB (SPL), which is decibels relative to the quietest noise a human can hear.

## **Pre-weighted Data**

The Sound Phidget also reports data in dBA (SPL) and dBC (SPL). These are special standardized weightings of the frequency range created for specific purposes. For example, dBA puts less emphasis on lower frequencies that the human ear doesn’t pick up, making it ideal for measuring loudness as heard by your ear.

## **Frequency Analysis**

This Phidget is also capable of analyzing specific frequency bands of sound. Every time data is sent to your program, an array of 10 values will be sent, each one corresponding to a different frequency band ranging from 31.5 Hz to 16kHz centered.

## **Product Specifications**

### **Board Properties**

Controlled By VINT

### **Sensor Properties**

|                       |                |
|-----------------------|----------------|
| Sound Level Min       | * 34 dB        |
| Sound Level Max       | 102 dB         |
| Sampling Interval Max | 1000 ms/sample |
| Sampling Interval Min | 100 ms/sample  |

### **Electrical Properties**

Current Consumption Max 26 mA

Current Consumption Min (unconfigured) 16  $\frac{1}{4}$ A

**Physical Properties**

Operating Temperature Min -20 °C

Operating Temperature Max 70 °C

\* – Below 34 dB, the sensor will be picking up white noise.