Accelerometer Phidget

Accelerometers are the quintessential motion sensor, from robotics to motion capture. The Accelerometer Phidget measures up to ±8g (or 78.5 m/s²) in each axis, which is more than you'll ever produce in most ordinary applications. The MOT1100 connects to a port on a VINT Hub. See the Connection & Compatibility tab for a list of hubs.

The most common use for an accelerometer is to measure the movement of an object, such as a person or robotic vehicle. You can compare the acceleration values on each axis to determine the direction and strength of the acceleration, and in some situations, even estimate velocity and position. An accelerometer could also be used to detect vibration. For example, mounted to a walking surface, it could be used to record the footsteps of a person walking or running. Another common way to use an accelerometer is as a tilt sensor. When mounted on a stationary object, an accelerometer will measure ≈1g downward (due to the earth's gravity). If the object is tilted, the angle of this 1g acceleration will change and this change can be measured.

Other Options

The Accelerometer Phidget works best in applications that care mostly about the direction and approximate strength of movement. If you need more precise measurements, have a look at the Other Accelerometers tab for more appropriate options.

Product Specifications

Board Properties	
Controlled By	VINT
Accelerometer	
Acceleration Measurement Max	± 8 g
Acceleration Measurement Resolution	1 mg
Accelerometer Noise	± 5 mg

Sampling Interval Min	20 ms/sample
Sampling Interval Max	60 s/sample
Electrical Properties	
Current Consumption Max	* 2.3 mA
Current Consumption Min	319 µA
Physical Properties	
Operating Temperature Min	-40 °C
Operating Temperature Max	85 °C

* – Current consumption varies depending on selected data interval. See the technical section of the User Guide for details.