Spatial Phidget

Combining a 3-axis accelerometer, 3-axis gyroscope, and 3-axis magnetometer, the Spatial Phidget is the all-in-one motion package for your VINT Hub. By analyzing data from these three devices, you can use the Spatial Phidget in a number of interesting ways. For example, you could use data from all three to track the movement and direction of a vehicle or robot. Or, you could use the accelerometer on a surface to measure nearby movement or vibration, or on a stationary object to measure tilt. The MOT1101 connects to a port on a **VINT Hub**. See the “Comaptible Products” tab for a list of hubs.

Other Options

The Spatial Phidget is intended for applications where the amount and direction of movement are more important than the precise numbers. If you need an added degree of precision in your project, have a look at the “Other Spatials” 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 Max	60 s/sample
Sampling Interval Min	20 ms/sample
Gyroscope	
Gyroscope Speed Max	± 2000°/s
Gyroscope Resolution	* 0.07°/s
Gyroscope Noise	± 0.5°/s
Sampling Interval Max	60 s/sample
Sampling Interval Min	20 ms/sample

Magnetometer	
Magnetic Field Max	± 8 G
Magnetometer Resolution	300 µG
Magnetometer Noise	± 7.5 mG
Sampling Interval Max	60 s/sample
Sampling Interval Min	20 ms/sample
Electrical Properties	
Current Consumption Max	** 11.5 mA
Current Consumption Min	155 µA
Physical Properties	
Operating Temperature Min	-30 °C
Operating Temperature Max	85 °C

* – Gyroscope resolution varies with angular rate. See the technical section of the User Guide for details.

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