

## **For Immediate Release**

### **Contact:**

Bernard Rousseau  
Director of Marketing  
403.282.7335

## **Self-calibrating Compass/Gyroscope/Accelerometer**

**CALGARY, Alberta, May 31, 2010** — Phidgets Inc. released today the 1056 - PhidgetSpatial 3/3/3 which combines a Compass 3-Axis, a Gyroscope 3-Axis and an Accelerometer 3-Axis 5G.

"We have taken the time to rigorously test the product to ensure that it provides 'real life' data, instead of simply relying on the sensors' technical specifications." says Chester Fitchett, CEO of Phidgets. " We also use precise voltage supply filtering to guarantee low noise and correct sensor operation." added Chester.

The Compass is continuously calibrated for changes in sensitivity and offset. Errors introduced by magnetic fields and distortion of the earth's magnetic field may be compensated out by using our calibration program to calculate the correction factors to feed the device.

Each Gyroscope axis is calibrated for sensitivity to rotation and cross-axis mis-alignment.

Each accelerometer axis is calibrated for cross-axis mis-alignment, sensitivity to positive and negative acceleration, and offset.

### **Product Specifications**

#### **Compass**

Resolution: 400 $\mu$ G Minimum

Offset ( $^{\circ}$ ) from North: 2 $^{\circ}$  Typical

#### **Gyroscope**

Measurement Range:  $\pm 400$   $^{\circ}$ /s

Resolution: 0.02  $^{\circ}$ /s

Drift/minute: 4 $^{\circ}$  Typical

Typical error over rotation @ 1g: 2mg

#### **Accelerometer**

Acceleration Bandwidth @ 1ms sample rate: 100 Hz

Measurement Range (XYZ Axis):  $\pm 5$ g (40 m/s<sup>2</sup>)

Axis 0 Noise Level (X Axis): 300 $\mu$ G standard deviation ( $\sigma$ ) at 128 samples/second

Axis 1 Noise Level (Y Axis): 300 $\mu$ G standard deviation ( $\sigma$ ) at 128 samples/second

Axis 2 Noise Level (Z Axis): 500 $\mu$ G standard deviation ( $\sigma$ ) at 128 samples/second

### **PhidgetSpatial 3/3/3 board**

Data Rate: 4ms to 1000ms per sample; 16ms to 1000ms over the webservice

Min/Max USB Voltage: 4.75 - 5.25 VDC

USB Current Specification: 45mA max

USB Speed: Full Speed (12Mbit)

### **Software Environment**

“Unlike a lot of our competitor’s products that require their users to write some firmware code in order to use their sensor, we are completely “Plug and Play” says Bernard Rousseau, Director of Marketing. “With Phidgets, you plug it in and start using it and when it comes to programming, the user, not us, decides which operating system and which computer language he wants to use”, added Rousseau.

Users can program Phidgets using a simple yet powerful and well documented Application Programming Interface (API) that is supported under Windows (2000, XP, Vista), Windows CE, Mac OS X, and Linux. Users can write programs in Visual Basic, VB.NET, C#, C/C++, Flash/Flex, Java, Labview, Matlab, ActionScript 3.0, and Cocoa.

Phidgets also provides programming examples for all its products to help programmers write their own programs. The API Libraries as well as the examples and the documentation are available at no charge on [www.Phidgets.com](http://www.Phidgets.com).

### **Pricing and Availability**

The 1056 PhidgetSpatial 3/3/3 is available now. The suggested resale price is \$150.00 Canadian.

### **About Phidgets**

Phidgets, Inc. is a technology leader in the design and manufacture of low-cost control and sensing modules connected to personal computers through the USB port. Phidgets products are ideally suited for fast prototyping. The privately held company is based in Calgary, Alberta, Canada.

### **Contact Information**

Bernard Rousseau  
Director of Marketing

Address: Phidgets Inc.  
Unit1, 6115 - 4th Street S.E.  
Calgary, Alberta, Canada  
T2H 2H9

Web Site: [www.Phidgets.com](http://www.Phidgets.com)

Phone: 1-403-282-7335

Fax: 1-403-282-7332

E-mail: [bernard@phidgets.com](mailto:bernard@phidgets.com)

Sales Inquiries: [sales@phidgets.com](mailto:sales@phidgets.com)

###

