# PhidgetInterfaceKit 8/8/8 w/6 Port Hub



**Note:** The 1019\_1B is identical to the 1019\_1, except that you have the option of whether you want to include the USB cable.

#### **Analog Inputs**

The analog inputs are used to measure continuous voltage outputs generated by various sensors such as temperature, humidity, position, or pressure. Phidgets offers a wide variety of sensors that can be plugged directly into the board using the cable included with the sensor.

Sampling rates can be set at 1ms, 2ms, 4ms, 8ms and multiple of 8ms up to 1000ms.

For more information about these inputs and their connectors, have a look at the Analog Input Primer.

#### **Digital Inputs**

The Digital Inputs have a Digital Input Hardware Filter to eliminate false

triggering from electrical noise. They can be used to convey the state of devices such as push buttons, limit switches, relays, and logic levels.

### **Digital Outputs**

The Digital Outputs can be used to drive LEDs, solid state relays (such as the 3052 SSR Relay Board), transistors; in fact, anything that will accept a CMOS signal.

#### **USB Hub**

Connecting additional USB devices to the 1019 is as easy as plugging them into the on-board 6-port hub. Each USB port on the hub has a maximum current supply of 500mA.

#### Comes packaged with

• A Hardware mounting kit (4 nuts and bolts (M3), 4 plastic spacers)

## **Product Specifications**

#### Board

Controlled By

API Object Name

DigitalInput, DigitalOutput, VoltageInput, VoltageRatioInput

USB Voltage Min

4.6 V DC

USB Voltage Max

5.5 V DC

|         | Constant Walkers Miss                      | C V DC          |  |  |  |
|---------|--|-----------------|--|--|--|
|         | Supply Voltage Min                         | 6 V DC          |  |  |  |
|         | Supply Voltage Max                         | 15 V DC         |  |  |  |
|         | Current Consumption Min                    | 10 mA           |  |  |  |
|         | Current Consumption Max                    | 500 mA          |  |  |  |
|         | Available External Current                 | 500 mA          |  |  |  |
|         | Power Jack Hole Diameter                   | 5.5 mm          |  |  |  |
|         | Power Jack Pin Diameter                    | 2.1 mm          |  |  |  |
|         | Power Jack Polarity                        | Center Positive |  |  |  |
|         | Recommended Wire Size                      | 16 – 26 AWG     |  |  |  |
|         | USB Speed                                  | Full Speed      |  |  |  |
|         | Operating Temperature Min                  | 0 B°C           |  |  |  |
|         | Operating Temperature Max                  | 70 B°C          |  |  |  |
|         | Voltage Inputs                             |                 |  |  |  |
|         | Number of Voltage Inputs                   | 8               |  |  |  |
|         | Voltage Input Resolution                   | 10 bit          |  |  |  |
|         | Input Impedance                            | 900 k0©         |  |  |  |
|         | Input Voltage Min                          | 0 V DC          |  |  |  |
|         | Input Voltage Max                          | 5 V DC          |  |  |  |
|         | 5V Reference Error Max                     | 0.5 %           |  |  |  |
|         | Voltage Input Update Rate Min              | 1 samples/s     |  |  |  |
|         | Voltage Input Update Rate Max (4 Channels) | 1000 samples/s  |  |  |  |
|         | Voltage Input Update Rate Max (8 Channels) | 500 samples/s   |  |  |  |
|         | Voltage Input Update Rate Max (WebService) | 62.5 samples/s  |  |  |  |
|         | Digital Inputs                             |                 |  |  |  |
|         | Number of Digital Inputs                   | 8               |  |  |  |
|         | Pull-up Resistance                         | 15 k0©          |  |  |  |
|         | Low Voltage Max (True)                     | 900 mV DC       |  |  |  |
|         | High Voltage Min (False)                   | 4.2 V DC        |  |  |  |
|         | Low Voltage Trigger Length Min             | 4 ms            |  |  |  |
|         | High Voltage Trigger Length Min            | 15 ms           |  |  |  |
|         | Digital Input Voltage Max                  | B± 15 V DC      |  |  |  |
|         | Digital Input Update Rate                  | 125 samples/s   |  |  |  |
|         | Digital Outputs                            |                 |  |  |  |
|         | Number of Digital Outputs                  | 8               |  |  |  |
|         | Series Resistance                          | 300 O©          |  |  |  |
|         | Digital Output Current Max                 | 16 mA           |  |  |  |
|         | Digital Output Voltage Min                 | 0 V DC          |  |  |  |
|         | Digital Output Voltage Max                 | 5 V DC          |  |  |  |
| USB Hub |  |                 |  |  |  |
|         | Number of USB Ports                        | 6               |  |  |  |
|         | Available Current per USB Port             | 500 mA          |  |  |  |
|         |  |                 |  |  |  |