

# 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	USB (Mini-USB)
API Object Name	DigitalInput, DigitalOutput, VoltageInput, VoltageRatioInput
USB Voltage Min	4.6 V DC
USB Voltage Max	5.5 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 k $\Omega$
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 k $\Omega$
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 $\pm$ 15 V DC
Digital Input Update Rate	125 samples/s

#### **Digital Outputs**

Number of Digital Outputs	8
Series Resistance	300 $\Omega$
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

