PhidgetInterfaceKit 8/8/8

Note: The 1018_2B is identical to the 1018_2, except that it comes pre-assembled in a plastic shell enclosure and you have the option of which length of USB cable you want to include.

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.

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
Current Consumption Min	13 mA
Current Consumption Max	500 mA
Available External Current	487 mA
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 kO©
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 kO©
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