PhidgetInterfaceKit 0/16/16

Note: The 1012_2B is identical to the 1012_2, except that you have the option of whether you want to include the USB cable.

Digital Inputs

The Digital Inputs are activated by an external voltage source, triggering on a wide voltage range: 4 to 30VDC. They provide built-in filtering, to eliminate false triggering from electrical noise. They can be used to convey the state of on/off devices, such as push buttons, limit switches, relays.

Digital Outputs

The Open Collector Digital Outputs can be used to directly control substantial devices, switching up to 30VDC at up to 2 Amps. The Output acts as a switch to ground, so the circuit you're switching will need an external power supply. Each output is protected from transient voltages typical when switching inductive devices – relays, solenoids, motors. The Outputs can be used to directly control devices requiring substantial power such as incandescent lights, high power LEDs, relays, solenoids, motors.

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
USB Voltage Min	4.6 V DC
USB Voltage Max	5.5 V DC
Current Consumption Min	14 mA
Current Consumption Max	500 mA
Available External Current	394 mA
Recommended Wire Size	16 – 26 AWG
USB Speed	Low Speed
Operating Temperature Min	0 B°C
Operating Temperature Max	70 B°C
Digital Inputs	
Number of Digital Inputs	16
Digital Input Impedance	10 kO©
Low Voltage Max (False)	900 mV DC
High Voltage Min (True)	4.2 V DC
Low Voltage Trigger Length Min	16 ms
High Voltage Trigger Length Min	4 ms
Digital Input Voltage Max	B± 30 V DC
Digital Input Update Rate	125 samples/s
Relay Properties	
Number of Relays	16
Series Resistance	200 mO©
Open Collector Voltage Max	30 V DC
Digital Output Current Sinking Max	(per channel) 2 A