PhidgetInterfaceKit 8/8/8 Mini-Format

Product Description

Provides the full functionality of the 8/8/8 I/O board in a small DIP-36 package that is plugged into your own board. If you want the 8/8/8 functionality but space is an issue, or you are building a number of units and want to eliminate wiring between boards, this is the way to go.

You can create a smaller system by integrating custom electronics into your PCB, and by only using connectors for the wiring required in your system. Eliminating or reducing wiring also helps create a much more reliable system.

The 1010 – PhidgetInterfaceKit allows you to connect devices to any of 8 analog inputs, 8 digital inputs and 8 digital outputs. It provides a generic, convenient way to interface your PC with various devices.

Product Specifications

Board

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
USB Speed	Full Speed
Operating Temperature Min	0 °C
Operating Temperature Max	70 °C

Analog Inputs

Number of Analog Inputs	8
Analog Input Resolution	10 bit
Input Impedance	900 k?
Analog Input Voltage Min	0 V DC
Analog Input Voltage Max	5 V DC
5V Reference Error Max	0.5 %
Analog Input Update Rate Min	1 samples/s
Analog Input Update Rate Max (4 Channels)	1000 samples/s
Analog Input Update Rate Max (8 Channels)	500 samples/s
Analog Input Update Rate Max (WebService)	62.5 samples/s

Digital Inputs

Number of Digital Inputs	8
Pull-up Resistance	15 k?
Low Voltage Max (True)	1.3 V DC
High Voltage Min (False)	3.8 V DC
Digital Input Voltage Max	± 15 V DC
Digital Input Update Rate	125 samples/s
Trigger Length Min	3 ms

Digital Outputs

Number of Digital Outputs	8

Series Resistance	300 ?
Digital Output Current Max	16 mA
Digital Output Voltage Min	0 V DC
Digital Output Voltage Max	5 V DC

Warning

The PhidgetInterfaceKit 8/8/8 Mini-Format is intended for OEMs and system integrators.

In order to use the 1010, you must be comfortable with designing your own circuit. You will need to understand the “signals” coming from and going to the 1010.

If you are not familiar with Phidgets, we recommend purchasing a 1018 to familiarize yourself with Phidget concepts before attempting to design the 1010 into your system.