

PhidgetInterfaceKit 0/0/4



Note: The 1014_2B is identical to the 1014_2, except that you have the option of whether you want to include the USB cable.

The PhidgetInterfaceKit 0/0/4 allows you to control high power devices such as incandescent light bulbs, fans, and pumps by electronically switching power on and off.

The 1014 has 4 Relay Outputs for switching AC or DC power; the relays are Single Pole Double Throw (SPDT).

Note: This board is not suitable for switching signals. It takes at least 100mA of current to bridge the oxide layer that forms on the relay contacts, and most signals will not meet this requirement. If you need to switch signals, check out the 1017 – PhidgetInterfaceKit 0/0/8.

Comes Packaged with

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

Product Specifications

Physical Properties

API Object Name	InterfaceKit
Switch Type	SPDT
Switching Speed Max	20 cpm
Recommended Wire Size	12 – 24 AWG
Operating Temperature Min	0 B°C
Operating Temperature Max	70 B°C

Board Properties

Controlled By	USB (Mini-USB)
API Object Name	DigitalOutput

Electrical Properties

Dielectric Strength	1.5 kV AC
Contact Resistance Max	120 mΩ
Load Voltage Max (DC)	* 30 V DC
Load Voltage Max (AC)	277 V AC
Load Current Min	100 mA
Load Current Max (DC)	7 A
Load Current Max (AC)	12 A
Turn-on Time Max	10 ms
Turn-off Time Max	10 ms
Current Consumption Min	14 mA
Current Consumption Max	300 mA
USB Speed	Low Speed

*Note: Switching this relay at voltages higher than 30V will result in a reduced product lifespan.

Please Note: This relay cannot be switched at its maximum AC voltage and current at the same time. Ensure that total power of the load does not exceed the switching power for the relay. For example, you can switch this relay at 277V AC and 6.3A (1750VA), or at 145V AC and 12A (1750VA), but not at 277V and 12A (3324VA).

Estimated Relay Lifespan

The lifespan of the relays on this Phidget vary depending on how much current you're switching and whether it's AC or DC. The following graph illustrates the relationship between load current and relay lifespan:



The vertical axis is the lifespan of the relay (number of actuations) and the horizontal axis is load current in amps. As you can see, increasing load current from 5A to 10A can reduce relay life by more than half.

Software Objects

Channel Name	API	Channel
Power Relay	DigitalOutput	0 – 3

