Phidget FrequencyCounter

Note: The 1054_0B is identical to the 1054_0, except that you have the option of whether you want to include the USB cable.

The 1054 – PhidgetFrequencyCounter is designed to count events from an analog signal over time and calculate a frequency from it. The product can count a logic level or signal centered around zero volts. Signals with a different ground can be counted, provided they are within the common mode range (B±10V).

The Frequency Counter can also power small devices, such as Hall effect, flow rate sensors, tachometers, and other sensors.

The PhidgetFrequencyCounter contains two channels to sense two different inputs. Each channel has two different circuits to sense for logic level-frequencies or zero-centered frequencies. The measurable frequency is accurate to 0.25% up to 1MHz. The Frequency Counter may measure frequencies past 1 Mhz, but the input voltage specifications will not hold.

The PhidgetFrequencyCounter can measure frequencies down to ~ 0.01Hz. However the response time of these measurements is directly related to the frequency, thus it could take 1 or 2 periods(100-200s) to detect the input frequency.

Comes Packaged with

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

Product Specifications

FrequencyCounter Input	
API Object Name	FrequencyCounter
Controlled By	USB (Mini-USB)
Number of Channels	2
Frequency Error Max	0.25 %
Input Frequency Max	1 MHz
Frequency Input Voltage Max	B± 20 V DC
Amplitude Min (Zero-Centered Input)	110 mV DC
Hysteresis (Zero-Centered Input)	B± 30 mV DC
Ground Offset Min	-6.3 V DC
Ground Offset Max	10.3 V DC
Low Voltage Max (False)	800 mV DC
High Voltage Min (True)	3 V DC
Electrical Properties	
USB Voltage Min	4.8 V DC
USB Voltage Max	5.3 V DC
USB Speed	Full Speed
Current Consumption Max	42 mA
Available External Current	450 mA
Input Impedance	(30pF) 332 kO©
Physical Properties	
Recommended Wire Size	16 – 26 AWG
Operating Temperature Min	0 B°C
Operating Temperature Max	70 B°C