Isolated 16-bit Voltage Output Phidget

Product Description

Generating extremely precise voltages is easy with this Phidgets voltage output module. It is designed to interface with devices that are controlled by an analog voltage signal. Simply plug it in to a VINT port, and you'll be able to set a voltage in your program between -10 and +10 volts with 16 bit resolution (300µV) at a current of up to 5mA (See the Connection & Compatibility tab for a list of VINT Hubs). If the attached device draws more than 5mA and the voltage begins to drop below the value specified, a warning event will be launched so your program can take an appropriate action. This Phidget is factory calibrated to ensure output accuracy.

Selectable Voltage Range

Need higher resolution? The output on this Phidget also has a 0 to 5V terminal that can be used instead of the ±10 terminal, yielding a resolution of 76µV. Both terminals are controlled as the same object in software and cannot be used at the same time.

Isolated for Stability

This board is electrically isolated from input to output, protecting your system fom instability caused by unintentional ground loops. If you need update speed more than isolation or voltage range, have a look at the VINT 12-bit Voltage Output 4V.

Product Specifications

Board Properties

Controlled By
VINT

Electrical Properties

Current Consumption Min
35 mA

Current Consumption Max
85 mA

Voltage Outputs

Number of Voltage Outputs
1

Current Sourcing
varies*

Current Sinking
varies*

Voltage Outputs (±10V Mode)

Voltage Output Max
± 10 V DC

Output Voltage Resolution
(16-bit) 300 µV DC

Voltage Output Noise
± 200 µV DC

Voltage Outputs (5V Mode)

Voltage Output Max
5 V DC

Voltage Output Noise
± 100 µV DC

Output Voltage Resolution
(16-bit) 76 µV DC

Physical Properties

Recommended Wire Size
16 – 26 AWG

Operating Temperature Min
-40 °C

Operating Temperature Max
85 °C

* Current sourcing and sinking capability varies based on selected output

voltage. Please visit the technical section of the User Guide for details.