VINT Hub Phidget

If you place an order with Phidgets, it’s very likely you’ll want a VINT Hub Phidget to tie it all together.

Six Versatile I/O Ports

With a VINT Hub Phidget, you can interface six devices to your computer through a single USB port. Each VINT port can perform one of four roles: Communicating with an intelligent VINT Device, reading a 0-5V Voltage or ratiometric sensor, acting as a digital output, or reading switches as a digital input. Each port has a power and ground pin, so you can also use the ports to gain access to the USB voltage supply directly.

Plug in one of our many VINT-enabled Phidgets that perform a wide variety of functions. Control motors and LEDs, measure temperature or motion, or build a large scale system with many inputs and outputs.

Easy to Use

VINT Devices are ‘plug and program’: automatically discovered by the Phidget API with the same ease of programming you’ve come to expect from Phidgets. Each VINT device has a full API with functions and events to make programming a snap.

Analog Sensor Compatible

Sometimes, you just need a few simple analog voltage sensors. Luckily, your collection of Phidget Analog Input sensors is not obsolete; each port on the USB VINT Hub can interface a 0-5V sensor. The VINT Port is backwards compatible with both ratiometric and non-ratiometric Phidget analog sensors.

Digital I/O Mode

In digital output mode, a VINT port can be used to drive LEDs, relays, digital circuits, and other simple electronics. Each port is PWM-enabled, allowing you to dim LEDs to a specific brightness.

Wire a switch or sensor contact directly into a VINT Port, and use the Digital Input mode to read the state of the switch.

If you need more than six inputs or outputs, you can expand by attaching a VINT I/O module. For example, there are VINT digital output modules with 16 outputs, allowing 96 digital outputs on a single VINT HUB Phidget!

Product Specifications

Board	
Controlled By	USB (Mini-USB)
Number of VINT Ports	6
Electrical Properties	
USB Voltage Min	4.5 V DC
USB Voltage Max	5.3 V DC
USB Speed	High Speed
Current Consumption Min	32.5 mA
Available External Current	470 mA
Voltage Inputs	
Voltage Input Resolution	* 16 bit
Sensor Input Impedance	324 k?©
Input Voltage Min (DC)	0 V DC
Input Voltage Max (DC)	5 V DC
Voltage Input Noise	?± 630 ?¼V DC
Sampling Interval Max	60 s/sample
Number of Voltage Inputs	6 (Shared)
Sampling Interval Min	1 ms/sample
Digital Inputs	
Pull-up Resistance	124 k?©
Low Voltage Max (True)	1 V DC
High Voltage Min (False)	1.8 V DC
Low Voltage Trigger Length Min	3 ms
High Voltage Trigger Length Min	3 ms
Digital Input Voltage Max	5.5 V DC
Digital Input Type	Switch (Active Low)
Number of Digital Inputs	6 (Shared)
Digital Outputs	
Series Resistance	510 ?©
Digital Output Available Current	8.1 mA
Digital Output Voltage Min	0 V DC
Digital Output Voltage Max	3.3 V DC
PWM Frequency Max	50 kHz
PWM Resolution	0.8 %
Number of Digital Outputs	6 (Shared)
Physical Properties	
Operating Temperature Min	-40 ?°C
Operating Temperature Max	85 ?°C

*Voltage measured with a 10-bit ADC, **oversampled** to 16-bits.

Software Objects

Channel Name	API	Channel	Hub Port
Hub Port – Digital Input Mode			
Digital Input	DigitalInput	0	0 – 5
Hub Port – Digital Output Mode			
Digital Output	DigitalOutput	0	0 – 5
Hub Port – Voltage Input Mode			
Voltage Input	VoltageInput	0	0 – 5
Hub Port – Voltage Ratio Mode			
Voltage Ratio Input	VoltageRatioInput	0	0 – 5
6-Port USB VINT Hub Phidget			
VINT Hub	Hub	0	