

# 16x RC Servo Phidget



Perfect for robotics projects, this impressive Servo Phidget can control up to 16 RC servo motors independently from a single port on your **VINT hub** (See the “Compatible Products” tab for a list of hubs). It is powered externally by a 8-30V supply, providing a total of up to 20A of regulated power to its servos. You can control the regulator and choose a global voltage of 5.0V, 6.0V, or 7.4V. A servo will have more torque when running at a higher voltage, but will have a shorter overall lifespan. Check your servo’s data sheet and balance the voltage for your specific application.

## **User-friendly and Highly Compatible**

You can control the position, velocity and acceleration of each servo motor with non-blocking methods in our API. You can also set the minimum and maximum pulse width for each servo, and the actual position they correspond to. This allows you to use a wide variety of servos, not just the ones sold here at Phidgets.

## **Safety and Reliability**

This Phidget comes with a number of safety features built-in. The power terminal has polarity protection, so you won’t fry your board or your servos if you connect the power supply backwards. The voltage regulator that converts the 8-30V to the user specified voltage will automatically limit the current to a safe level, and a fuse protects the device from power surges. The VINT port is electrically isolated from the rest of the board, making it simple to build a reliable, high-current system.

## **Product Specifications**

### **Board Properties**

Controlled By VINT

### **Servo Controller**

Number of Motor Ports	16
Pulse Width Min	63 ns
Pulse Width Max	4 ms
Pulse Width Resolution	63 ns
Pulse Code Period	20 ms

#### **Electrical Properties**

Supply Voltage Min	8 V DC
Supply Voltage Max	30 V DC
Output Motor Voltage	5 V DC
Continuous Motor Current Max	(Total) 20 A
Selectable Output Voltage Levels	5.0, 6.0, 7.4 VDC
Current Consumption Max	20 A
Current Consumption Min	10 mA
Output Impedance (Motor)	100 $\Omega$

#### **Physical Properties**

Recommended Wire Size	12 – 24 AWG
Operating Temperature Min	-40 °C
Operating Temperature Max	85 °C