

# 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       |