

# SSR Relay Board 0.5A



Solid State Relays, or SSRs, are devices designed to operate like standard relays but without mechanical motion. By simply providing a small voltage to the control side of the circuit, you can open or close a higher powered circuit on the load side.

The SSR Board is safe to use with sensitive control devices like microprocessors, and will not damage a Phidget device or your PC. Optoisolation between the control inputs and outputs of the SSR in the form of an LED paired with a set of optically-controlled MOSFETs provides protection from output to input. An on-board diode across the relay output protects the board from static electricity and surges from inductive loads.

## Product Specifications

| Board                  |                     |
|------------------------|---------------------|
| Controlled By          | Digital Output (5V) |
| Electrical Properties  |                     |
| Relay Output Type      | MOSFET              |
| Isolation Method       | Photoelectric       |
| Dielectric Strength    | 1.5 kV AC           |
| Control Voltage Min    | 3 V DC              |
| Control Voltage Max    | 30 V DC             |
| Control Current        | 10 mA               |
| Load Voltage Max (DC)  | 40 V DC             |
| Load Voltage Max (AC)  | 28 V AC             |
| Load Current Max (AC)  | 500 mA              |
| Load Current Max (DC)  | 500 mA              |
| Turn-on Time Max       | 5 ms                |
| Turn-off Time Max      | 0.2 ms              |
| Contact Resistance Max | 850 mΩ              |
| Physical Properties    |                     |

|                                 |             |
|---------------------------------|-------------|
| Recommended Wire Size (Load)    | 16 – 26 AWG |
| Recommended Wire Size (Control) | 16 – 26 AWG |
| Operating Temperature Min       | -40 B°C     |
| Operating Temperature Max       | 85 B°C      |