

## 2 Channel Solid State Relay Board



A two-channel relay module (HCMODU0115) featuring 2x Omron G3MB-202P solid state relays. A Solid State Relay is similar to a mechanic relay where it can be controlled through a digital signal. Solid State Relay generates no noise and has a much longer lifespan in compared to the traditional mechanic relay.

### FEATURES:

- 2 channel 2 AMP Solid State Relay board
- Control 2 loads of up to 2 amps each at 120V or 240V AC.
- Good for lighting, holiday displays etc.
- Input control signal voltage:
  - 0-0.5V the state of low-level relay ON
  - 0.5-3.3V Unknown State
  - 3.3-5V high-level relay OFF
- Operating Voltage: 5V
- Operating Current: 16mA
- Maximum Load: 2A @ 240VAC

**SPECIFICATIONS:**

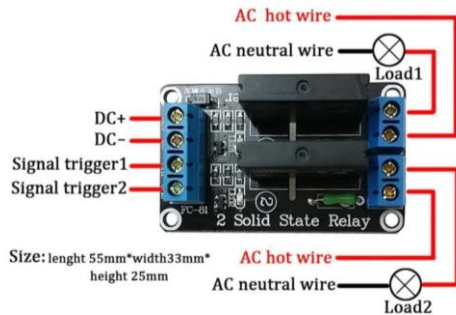
Voltage version	Quiescent current	Operating current	Trigger voltage	Trigger current
1 way 5V	0mA	12.5mA	0-2.5V	2mA
2 way 5V	0mA	22.5mA	0-2.5V	2mA

**FUNCTIONAL DESCRIPTION:**

- A two-channel relay module (HCMODU0115) featuring 2x Omron G3MB-202P solid-state relays. This 5V 2 Channel SSR G3MB-202P Solid State Relay Module is capable of switching AC voltages between 100 and 240V at up to a 2A current. The module can be controlled from a 5V digital source such as an Arduino microcontroller. A resistive type fuse is provided on the module to help protect excessive current draw.
- This 5V 2 Channel SSR G3MB-202P Solid State Relay Module 240V 2A Output with Resistive Fuse is based on the Omron G3MB SSR relay which can control up to 2A at 240VAC. This is a 2 Channel SSR relay module, each relay channel has 3 separate terminals, NO (Normal Open), COM (Common), NC (Normal Closed).
- A Solid State Relay is similar to a mechanic relay where it can be controlled through a digital signal. Solid State Relay generates no noise and has a much longer lifespan in compared to the traditional mechanic relay.
- When the input logic voltage is applied to the coil, the NC will disconnect from the COM breaking the conductivity between the two. At the same time, the NO will connect with the COM allowing conductivity between them. Depending on your wiring this will turn on or off the connected load.
- High-level triggering : There is a forward voltage between the signal trigger terminal (IN) and the negative pole of the power supply. Usually , a triggering method is used to connect the positive pole of the power supply to the trigger terminal. When the trigger terminal has a positive voltage or triggers. At the voltage, the relay pulls in.
- Low-level triggering : The voltage between the signal trigger terminal and the negative pole of the power supply is 0V, or the voltage at the trigger terminal is lower than the voltage of the positive pole of the power supply. When the voltage is low enough to

trigger, the relay is pulled in, usually A triggering method in which the negative pole of the power supply is connected to the trigger terminal , so that the relay is attracted.

**PIN FUNCTION:**



- DC+: Connect the positive pole of the power supply (power supply according to the relay voltage)
- DC-: Connect the negative pole of the power supply
- CH1: 1 Relay module signal trigger end (low level trigger is valid)
- CH2: 2 way relay module signal trigger end (low level trigger is valid)

**PACKAGE INCLUDES:**

1x 2 Channel Solid State Relay Board