

## 1 Channel Relay Board Without Optocoupler 5V



It is a 5V 1 Channel Without Light Coupling Relay. The relay normally open interface maximum load: AC 250V/10A, DC 30V/10A. It has a trigger current of 5mA, and module working voltage of DC 5V. Each channel of the module can be triggered by a jumper to set a high level or a low level. Fault-tolerant design, even if the control line is disconnected, the relay will not move. With status indicator: power (green), 1-channel relay status indicator (red). All module size interfaces can be directly connected through the terminal block, which is convenient and practical.

### FEATURES:

- The 8550 transistor drive, driveability.
- A fixed bolt holes for easy installation.
- It has a relay status indicator led Power LED(Green), 1 relay status indicator LED(Red)
- Relay control interface by single-chip IO.
- Low-level suction close, high-level release.
- Easy to use, simple 3 line structure.

#### **SPECIFICATIONS:**

- Operating Voltage (VDC): 3 ~ 5
- Trigger Voltage (VDC): 5
- Trigger Current (mA): 20
- Switching Voltage (VAC): 250@10A
- Switching Voltage (VDC): 30@10A
- Operating Temperature (°C): -40 to 85
- Opt. Relative Humidity(RH): 20% ~ 85%
- Storage condition (°C): – 65 to 175
- Length (mm): 43
- Width (mm): 26.3
- Height (mm): 17
- Weight (gm): 14

#### **FUNCTIONAL DESCRIPTION:**

- A relay is an electrically operated device. It has a control system and (also called input circuit or input contactor) and controlled system (also called output circuit or output contactor). It is frequently used in an automatic control circuit. To put it simply, it is an automatic switch to controlling a high-current circuit with a low-current signal.
- The advantages of a relay lie in its lower inertia of the moving, stability, long-term reliability and small volume. It is widely adopted in devices of power protection, automation technology, sport, remote control, reconnaissance, and communication, as well as in devices of electromechanics and power electronics. Generally speaking, a relay contains an induction part which can reflect input variable like current, voltage, power, resistance, frequency, temperature, pressure, speed and light etc. It also contains an actuator module (output) which can energize or de-energize the connection of controlled circuit. There is an intermediary part between input part and

an output part that is used to coupling and isolate input current, as well as actuate the output. When the rated value of the input (voltage, current and temperature etc.) is above the critical value, the controlled output circuit of the relay will be energized or de-energized.

**APPLICATION:**

- Raspberry Pi, Arduino, 8051, AVR, PIC, DSP, ARM, ARM, MSP430, TTL logic can drive the module
- PLC control
- Smart home control
- Industrial sector

**PACKAGE INCLUDES:**

1x 1 Channel relay board without Optocoupler 5V