



## Applications

- Automated Test Equipment
- Meter reading systems
- Medical equipment
- Battery monitoring
- Multiplexers

## Specification

Parameter	Value
Supply voltage	3.3V / 5V
Operating temperature	-40 – 85°C
Storage temperature	- 55°C – 125°C
Blocking voltage	60 V
Continuous load current	1A
Leakage current	0.2 uA(TYP.) 1 uA(Max.)
On-Resistance	0.5 Ω(TYP.) 0.7 Ω(Max.)
Isolation resistance	100 GΩ
Turn-On time	1.4 ms(TYP.) 5 ms(Max.)
Turn-Off time	0.2 ms(TYP.) 2 ms(Max.)
Interface	Digital

**Table 1.** *General Specification*

## Hardware Overview


### Pinout



- 4 GND: connect this module to the system GND
- 3 VCC: you can use 5V or 3.3V for this module
- 2 NC: not connected
- 1 CTR: control signal, high-close/low open
- 5 Load Screw Interface, normally open

Figure 1. Pinout

## Platforms Supported


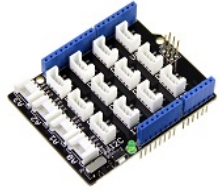


Arduino	Raspberry Pi	BeagleBone	Wio	LinkIt ONE
				

## Getting Started

### Play With Arduino

*Hardware*

#### Materials required

Seeeduino V4.2	Base Shield	Grove - Optocoupler Relay (M281)	Red LED
			

In addition, you can consider our new Seeeduino Lotus M0+, which is equivalent to the combination of Seeeduino V4.2 and Baseshield.

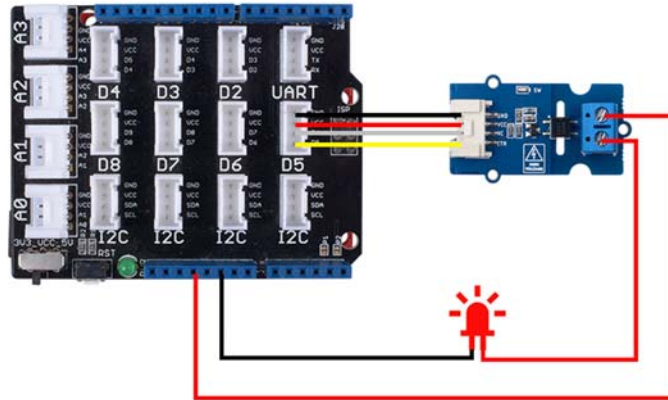
#### Note

**1** Please plug the USB cable gently, otherwise you may damage the port. Please use the USB cable with 4 wires inside, the 2 wires cable can't transfer data. If you are not sure about the wire you have, you can click here to buy

**2** Each Grove module comes with a Grove cable when you buy. In case you lose the Grove cable, you can click here to buy.

#### Hardware Connection

- **Step 1.** Plug Grove - Base Shield into Seeeduino.
- **Step 2.** Connect the Grove - Optocoupler Relay (M281) to the **D5** port of the Base Shield.
- **Step 3.** Connect the LED and the Grove - Optocoupler Relay (M281) to the **3.3V** and **GND** pin of the Grove - Base Shield.(Please refer to the figure below)
- **Step 4.** Connect Seeeduino to PC via a USB cable.



**Figure 2.** Pinout, please make sure connect to the 3.3v pin, 5v will damage this LED.

## Software

### Attention

If this is the first time you work with Arduino, we strongly recommend you to see Getting Started with Arduino before the start.

- **Step 1.** Copy the following code into a new sketch in the Arduino IDE

```
1const int Pinout = 5;
2
3void setup() {
4  pinMode(Pinout, OUTPUT);
5  Serial.begin(9600);
6}
7
8void loop() {
9
10  digitalWrite(Pinout, HIGH);
11  delay(500);
12  digitalWrite(Pinout, LOW);
13  delay(500);
14}
```

- **Step 2.** Upload the demo. If you do not know how to upload the code, please check How to upload code.

### Success

If everything goes well, we will see the LED flashing.

## Tech Support

Please submit any technical issue into our forum or drop mail to [techsupport@seed.cc](mailto:techsupport@seed.cc)  
[http://wiki.seeedstudio.com/Grove-Optocoupler\\_Relay-M281/4-15-19](http://wiki.seeedstudio.com/Grove-Optocoupler_Relay-M281/4-15-19)