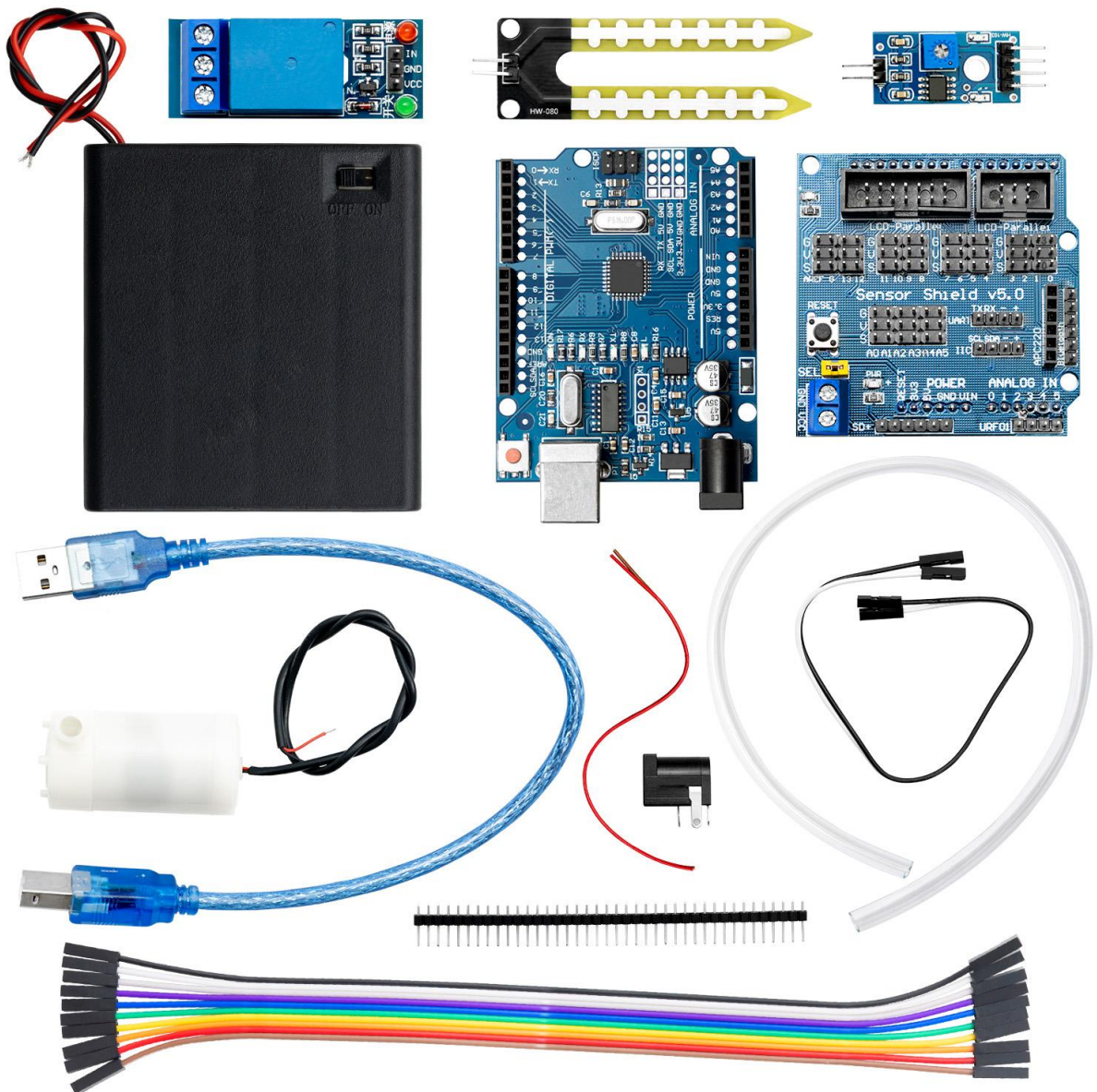


datasheet

Plant watering Kit



Scope of delivery

No.	Part	pcs.
1	Microcontroller ATmega328	1
2	USB Cable	1
3	Jumper wires F-F	10
4	Sensor Shield	1
5	Soil humidity sensor	1
6	PVC tube	1
7	Water pump	1
8	Relay Module High-Level-Trigger	1
9	DC power jack	1
10	Battery Case	1

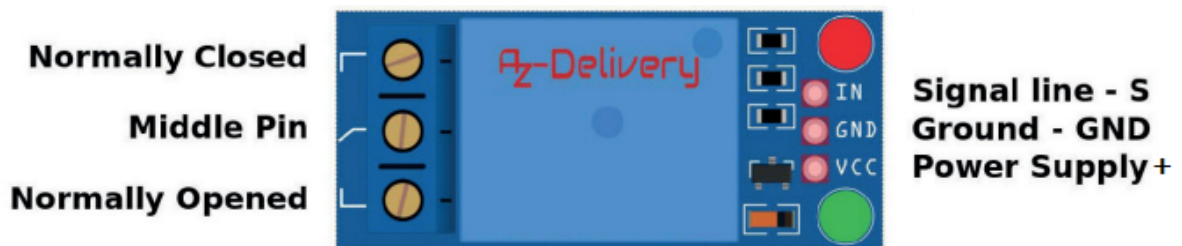
Specifications

Relay Module:

Maximum AC current and voltage: 5A 50VAC

Maximum DC current and voltage: 5A 30VDC

There is a normally open and one normally closed contact» To make the coil of relay energized you must have an input of 5VDC in the signal pin (logic 1).



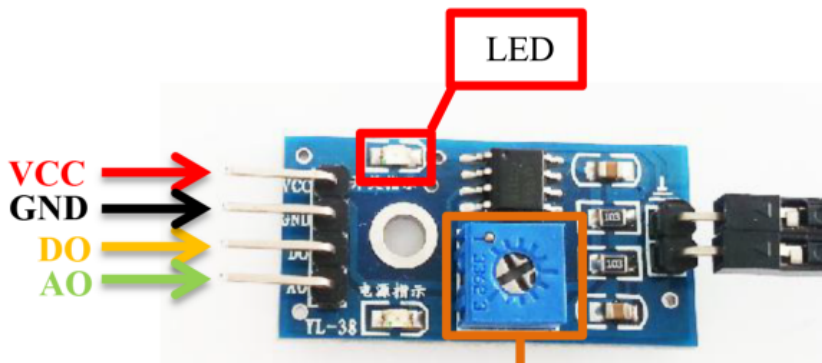
VCC	5V Power Supply
GND	Ground
In (signal line)	Control signal
NC	Normally Closed
NO	Normally Open
Common	Common

Soil Moisture Sensor module:

Input Voltage: 3.3V to 5V DC



Output: Digital (HIGH/LOW); Analog (0-5V);

Sensitivity Adjustable via potentiometer



Sensitivity Adjustor for High / Low Digital Output

- Clockwise for increasing sensitivity
- Anticlockwise for reducing sensitivity

Pin	Description	Function
VCC	+3.3V ~ +5V	Connect to +3.3V ~ +5V
GND	Ground	Connect to Ground
DO	Digital Output	<ol style="list-style-type: none"> Output Signal: HIGH <ul style="list-style-type: none"> • The sensor does not detect moisture. • LED's Status: OFF  Output Signal: LOW <ul style="list-style-type: none"> • The sensor detects the moisture surface. • LED's Status: ON 
A0	Analog Output	<p>The output voltage changing when the moisture is detected.</p> <ul style="list-style-type: none"> • Output voltage decreases from 5V → Moisture is being detected.

Water Pump:

Operating Voltage: 5V DC

Outside diameter of water outlet: 6.3mm

Inside diameter of water outlet: 4.1mm

Water inlet diameter: 7mm

Note: The pump should not be allowed to work in the air.

PVC tube:

Material: PVC

I.D. Size: 5.4mm

O.D. Size: 7mm

Length: 50cm

Battery Case:

Size: 65 x 70 x 19.5mm

4 x AA batteries, with on/off switch and DC plug.