SPECIFICATIONS OF COMPONENTS

1. **LDR Sensors**

Specifications

- Supply voltage: 4.5V~5.5V DC
- Measure current range: -5A~5A
- Sensitivity: 100mV/A

2. **Voltage and Current Sensor**

3. **DC Motor**

Specifications

- No-load Speed: 300RPM at 12 Volts;
- Torque: 0.08N-m;
- Power: 7.2W;
- No-load Current: 0.15A;

4. **Motor Driver IC-** L293D

In a single L293D chip, two h-Bridge circuits can rotate two DC motors independently.

Working

Pin 2 = Logic 1 and Pin 7 = Logic 0 | Clockwise Direction

Pin 2 = Logic 0 and Pin 7 = Logic 1 | Anticlockwise Direction

Pin 2 = Logic 0 and Pin 7 = Logic 0 | Idle [No rotation]

Pin 2 = Logic 1 and Pin 7 = Logic 1 | Idle [No rotation]

5. **Node MCU -** ESP-12E ESP8266 WiFiLuaIoTCH340

The NodeMCU is an open-source firmware and development kit(dev kit) that helps prototype IoT products with few luascript lines. The development kit based on ESP8266, integrates general purpose input-output (GPIO), pulse width modulator(PWW), 1-Wire, and ADC all in one board

6. **Solar Panel**

A photovoltaic (PV) module is a packaged assembly of typically 9×4 photovoltaic solar cells.

7. **Arduino IDE**