

Autonomous Water Level Monitoring System

Components Needed

1. Node MCU ESP 8266
2. BC547 (4)
3. SMPS/Adapter (5V 3A)
4. SSR Relays (2 For a dipole switch (complete isolation))
Select according to motor rating: Fotek SSR 40DA for a 1HP motor
NB: Motor inrush current will be 6 to 8 times more than normal running current.
Consider relays with snubber circuit, try to add one for extended relay life.
5. Resistors
 - a. 10K (8)
 - b. 220 ohms (4)
6. Wire connectors (Screw Type)
 - a. 5 pin connector (1)
 - b. 2 pin connector (3)
7. LCD Display 16*2 (1)
8. I2C For LCD (1)
9. Water Level Contact Type Probes (1 (*Pack of 5, stainless steel*))
10. Wires (According to current and length consideration)

Purchase Links

1. Node MCU ESP8266
[Buy ESP8266 NodeMCU CP2102 Board at Best Price](#)
2. BC547
[Buy BC547 NPN DIP Transistor\(Pack of 20\) Online at Robu.in](#)
3. SMPS/Adapter (5V 5A)
<https://amzn.in/d/3oXBEez>
4. SSR Relay
<https://amzn.in/d/5Bq7RgL>
5. 16*2 LCD Display
[16X2 Character Y-B LCD Display Module](#)
6. I2C For LCD
[Buy IIC/I2C Serial Interface Adapter Module Online at Robu.in](#)
7. Water Level Probes
<https://amzn.in/d/8kmOf1h>