**Arduino WEMOS Mega:**

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| Microcontroller | ATmega2560 |
| IC Wi-Fi | ESP8266 |
| USB-TTL converter | CH340G |
| Power Out | 5V-800mA |
| Power IN. USB | 5V (500mA max.) |
| Power IN. VIN/DC Jack | 9-24V |
| Power Consumption | 5V 800mA |
| Logic Level | 5V |
| USB | Micro USB |
| Clock Frequency | 16MHz |
| Operating Supply Voltage | 5V |
| Digital I/O | 54 |
| Analog I/O | 16 |
| Memory Size | 256kb |
| Data RAM Type/Size | 8Kb |
| Data ROM Type/Size | 4Kb |
| Operating temperature | −40С°/+125С° |
| antenna | Built-in\external antenna |

**DHT11 Sensor:**

3 to 5V power and I/O

2.5mA max current use during conversion (while requesting data)

Good for 20-80% humidity readings with 5% accuracy

Good for 0-50°C temperature readings ±2°C accuracy

No more than 1 Hz sampling rate (once every second)

**PIR Sensor:**

Wide range on input voltage varying from 4.V to 12V (+5V recommended).

Output voltage is High/Low (3.3V TTL).

Can distinguish between object movement and human movement.

Has to operating modes - Repeatable (H) and Non- Repeatable (L).

Cover distance of about 120° and 7 meters.

Low power consumption of 65mA.

Operating temperature from -20° to +80° Celsius.

**LDR:**

Resistance > 1MΩ when Dark

Resistance < 1kΩ when High Light Levels

Max power dissipation: 200mW

Max voltage @ 0 lux 200V

Peak wavelength 600nm

Min. resistance @ 10lux 1.8kΩ

Max. resistance @ 10lux 4.5kΩ

Typ. resistance @ 100lux 0.7kΩ

Dark resistance after 1 sec 0.03MΩ

Dark resistance after 5 sec 0.25MΩ

**LCD 16x2:**

Operating Voltage is 4.7V to 5.3V

Current consumption is 1mA

Alphanumeric LCD display module

Consists of two rows and each row can print 16 characters.

Can work on both 8-bit and 4-bit mode

It can also display any custom generated characters

**Relay:**

Max Current: 5A AC/DC (max).

Max Voltage: 250V AC/30V DC.

Nominal Voltage: 6V.

Coil resistance: 270Ω.

Coil Current: 44.4Ma.

Operating Voltage: 4.5 to 25V.