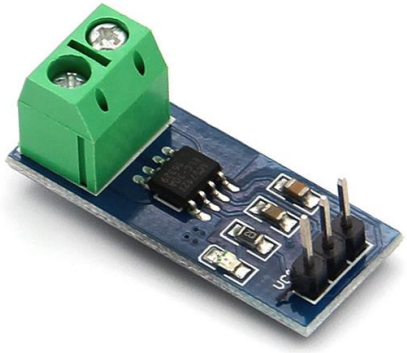
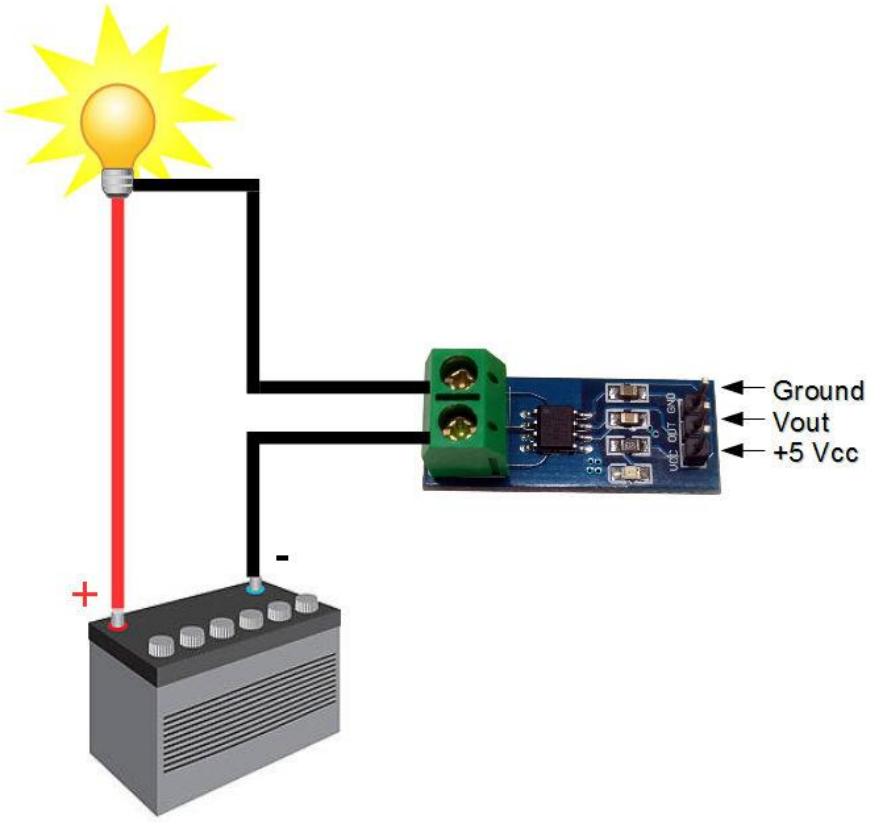
ACS712 Current Sensor Module 30A

User Manual



Hook UP Diagram:



Example Code:

```
// ACS712 Demo Sketch
//


// Select sensitivity for appropriate ACS712 version:
//int Sens = 185;          // Sensitivity in mV/A for the 5A version
//int Sens = 100;          // Sensitivity in mV/A for the 20A version
int Sens = 66;           // Sensitivity in mV/A for the 30A version
```

```
const int analogIn = A0;  // Analog input pin

int OffsetVoltage = 2500; // 0 Current offset Voltage in mV @ 0 amps

int RawValue= 0;          // Init result variables
double Voltage = 0;       //
double Amps = 0;          //

void setup(){
 Serial.begin(9600);      // Start serial monitor
}

void loop(){

 RawValue = analogRead(analogIn);           // Read voltage from ASC712
 Voltage = (RawValue / 1024.0) * 5000;      // Convert to mV
 Amps = ((Voltage - OffsetVoltage) / Sens); // Convert to amps


 Serial.print("A/D Read Value = " );  // A/D read value
 Serial.print(RawValue);              //

 Serial.print("\t mV = ");           // ACS712 Output voltage
 Serial.print(Voltage,3);           //

 Serial.print("\t Amps = ");         // Current measured
 Serial.println(Amps,3);            //

 delay(2500);                       // Wait a bit then do it again
}
```