

```

#include <ESP8266WiFi.h>
#include <Arduino.h>
#include <Wire.h>
#include <SoftwareSerial.h>
String apiKey = "*****"; // Enter your Thingspeak API Key
const char* ssid = "*****"; // Enter your WiFi Network's SSI
const char* pass = "*****"; // Enter your WiFi Network's
Password
const char* server = "api.thingspeak.com";

int analogInput = A0;
int value = 0;
int in_min=22;
int in_max=28;

float Soc;

float vout = 0.0;
float vin = 0.0;
float R1 = 100300; // Resistor R1 100k
float R2 = 10140; // Resistor R2 10k
String $vin = "0";
WiFiClient client;
void setup() {
  pinMode(analogInput, INPUT);
  Serial.begin(115200);
  Serial.println("Connecting to ");
  Serial.println(ssid);
  WiFi.begin(ssid, pass);

  while (WiFi.status() != WL_CONNECTED)
  {
    delay(100);
    Serial.print("*");
  }
  Serial.println("");
  Serial.println("WiFi connected");
}
void loop(void) {
  value = analogRead(analogInput);
  vout = (value * 3.3) / 1023.0;
  vin = vout / (R2/(R1+R2));
  $vin = String(vin);
  Serial.print("INPUT V= ");
  Serial.println(vin,4);

  showonoled();
}

void showonoled() {
  Serial.println("Display on external");

  Soc = ((vin-in_min)/(in_max-in_min))*100;

  if( vin >=in_max)
  {
    Soc = 100;
  }
}

```

```

if (vin <= in_min)
{
    Soc= 1;
}

Serial.print("Soc =");
Serial.print(Soc,2);
Serial.print("  ");

delay(500);

if (client.connect(server, 80))
{

    String postStr = apiKey;
    postStr += "&field1=";
    postStr += String(vin);
    postStr += "&field2=";
    postStr += String(Soc);
    postStr += "\r\n\r\n";

    client.print("POST /update HTTP/1.1\n");
    delay(100);
    client.print("Host: api.thingspeak.com\n");
    delay(100);
    client.print("Connection: close\n");
    delay(100);
    client.print("X-THINGSPEAKAPIKEY: " + apiKey + "\n");
    delay(100);
    client.print("Content-Type: application/x-www-form-urlencoded\n");
    delay(100);
    client.print("Content-Length: ");
    delay(100);
    client.print(postStr.length());
    delay(100);
    client.print("\n\n");
    delay(100);
    client.print(postStr);
    delay(100);
}
client.stop();
Serial.println("Sending....");
delay(500);
}

```