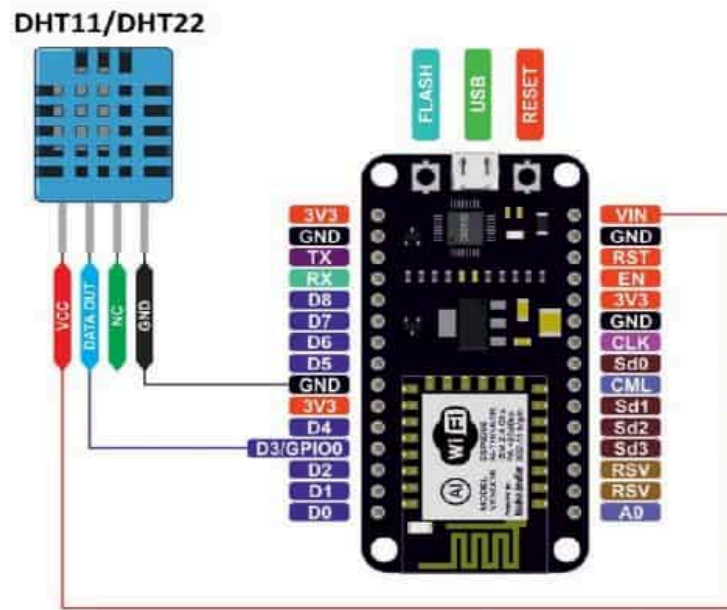

Connecting DHT11 to thingspeak

Pin diagram



Setting Thingspeak

1. Login
2. Create the channel

By giving the Name, Description and channel name then save the channel

[Private View](#)[Public View](#)[Channel Settings](#)[Sharing](#)[API Keys](#)[Data Import](#)

Channel Settings

Percentage Complete 50%

Channel ID 2448732

Name DHT11 Temperature and Humidity Sensor data

Description DHT11 Temperature and Humidity Sensor data

Field 1 Temperature ☒

Field 2 Humidity ☒

Field 3 ☐

Field 4 ☐

Field 5 ☐

Field 6 ☐

Field 7 ☐

Field 8 ☐

After Creating the channel you will get this interface

DHT11 Temperature and Humidity Sensor data

Channel ID: 2448732

Author: mwa0000025486217

Access: Private

DHT11 Temperature and Humidity Sensor data

Private View

Public View

Channel Settings

Sharing

API Keys

Data Import / Export

Add Visualizations

Add Widgets

Export recent data

MATLAB Analysis

MATLAB Visualization

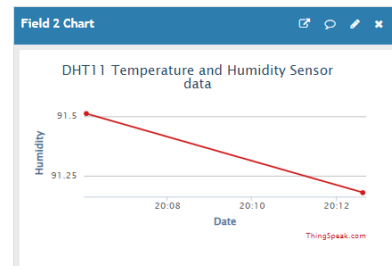
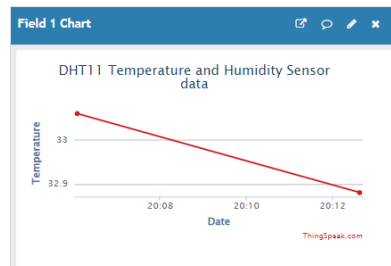
Channel 4 of 4 < >

Channel Stats

Created: about a month ago

Last entry: about a month ago

Entries: 2



Take the write API KEY

Private View

Public View

Channel Settings

Sharing

API Keys

Data Import

Write API Key

Key

G5IH29EH0VHE4A28

Generate New Write API Key

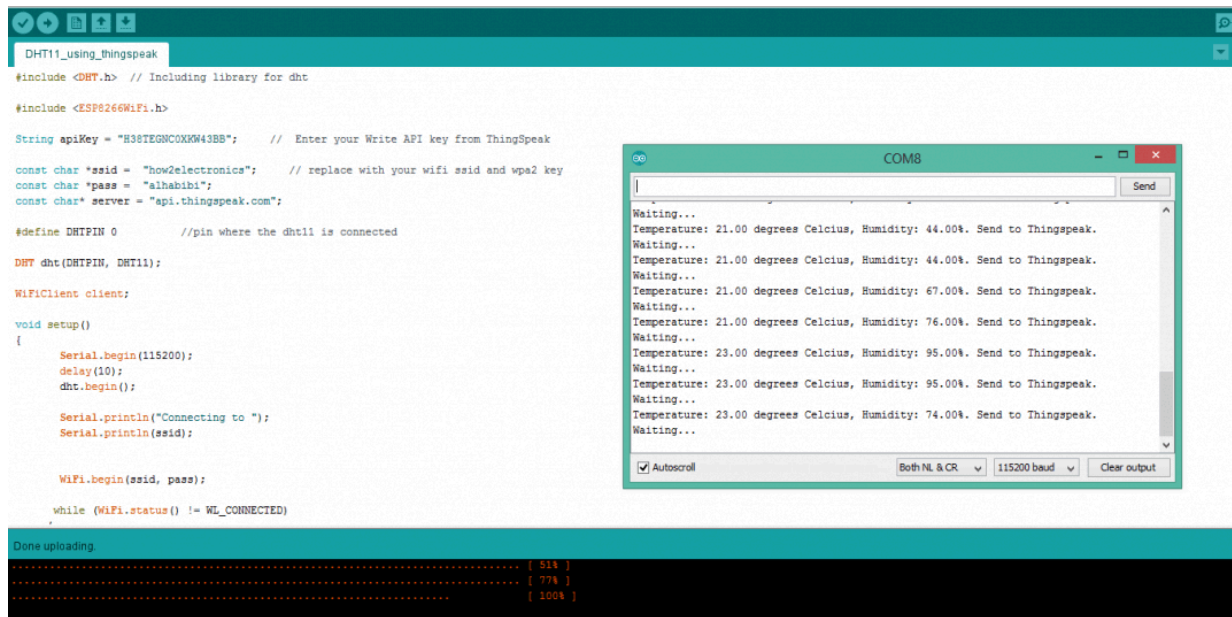
By going to API Key section

Source Code/Program:

1. Copy this program and paste it on Arduino IDE.
2. Download the DHT11/DHT22 library from GitHub and add it to your library manager.
3. Select the NodeMCU ESP-12E board from the board manager.
4. Paste your API Key from thingspeak which you created earlier on a programming section line.
5. Edit the program to change the wifi SSID and password with your own.

6. Compile the code and Upload it to NodeMCU board

Monitoring in Arduino IDE Serial Monitor



The screenshot shows the Arduino IDE interface. The main editor displays the code for 'DHT11_using_thingspeak'. The code includes the DHT library, sets up a ThingSpeak API key, and configures a NodeMCU board. The setup function initializes the serial port and connects to the ThingSpeak server. The loop function sends temperature and humidity data to ThingSpeak every 10 seconds.

```
#include <DHT.h> // Including library for dht
#include <ESP8266WiFi.h>

String apiKey = "H38TEGNCOKW43BB"; // Enter your Write API key from ThingSpeak
const char *ssid = "how2electronics"; // replace with your wifi ssid and wpa2 key
const char *pass = "alhabibi1";
const char *server = "api.thingspeak.com";

#define DHTPIN 0 //pin where the dht11 is connected
DHT dht(DHTPIN, DHT11);
WiFiClient client;

void setup()
{
  Serial.begin(115200);
  delay(10);
  dht.begin();

  Serial.println("Connecting to ");
  Serial.println(ssid);

  WiFi.begin(ssid, pass);

  while (WiFi.status() != WL_CONNECTED)
  {
    delay(1000);
    Serial.println("Waiting for connection...");
  }
}
```

The serial monitor (COM8) shows the output of the code, displaying temperature and humidity data being sent to ThingSpeak. The data is formatted as 'Temperature: [value] degrees Celcius, Humidity: [value]%. Send to Thingspeak.' followed by 'Waiting...'.

Done uploading.

Progress
[51%]
[77%]
[100%]

Graph result in thingspeak

