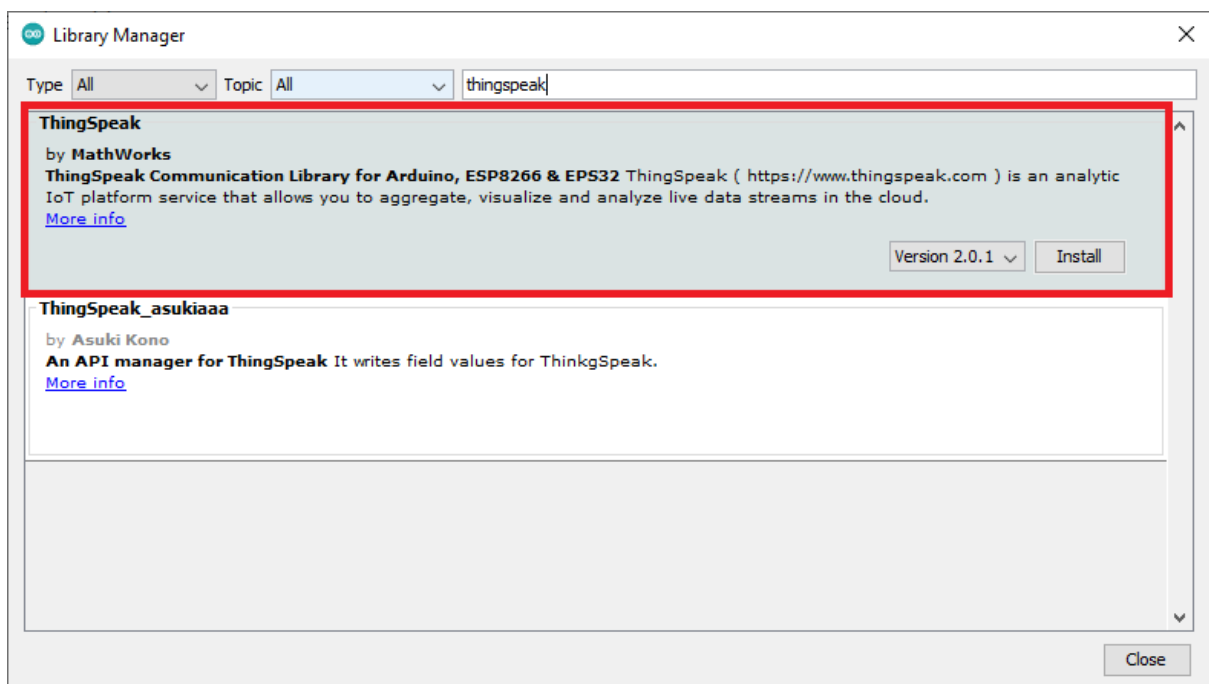


THINGSPEAK

ThingSpeak is an IoT analytics platform service that allows you to aggregate, visualize, and analyze live data streams in the cloud. You can send data to ThingSpeak from your devices, create instant visualization of live data, and send alerts without setting up servers or developing web software.

Installing the ThingSpeak Library

To send sensor readings to ThingSpeak, we'll use the thingspeak-arduino library. You can install this library through the Arduino Library Manager. Go to **Sketch > Include Library > Manage Libraries...** and search for “**ThingSpeak**” in the Library Manager. Install the ThingSpeak library by MathWorks.



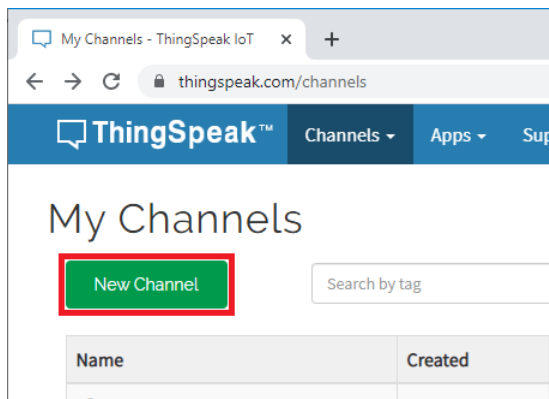
ThingSpeak – Getting Started

Go to ThingSpeak and click the “**Get Started For Free**” button to create a new account. This account is linked to a Mathworks account. So, if you already have a Mathworks account, you should log in with that account.

Creating New Channel

After your account is ready, sign in, open the “**Channels**” tab and select “**My Channels**”.

Press the “New Channel” button to create a new channel.



Type a name for your channel and add a description. For example, If you want to publish multiple readings (like humidity and temperature), you can enable more fields as you'll see later in this if needed.

ThingSpeak Edit Add New Channel Settings Configuration

New Channel

Name: CH1

Description: channel to publish temperature and humidity real time values

Field 1: humidity ☒

Field 2: temperature ☒

Field 3: ☐

Field 4: ☐

Field 5: ☐

Field 6: ☐

Save Channel

Help

Channels store all the eight fields that can status data. Once you visualize it.

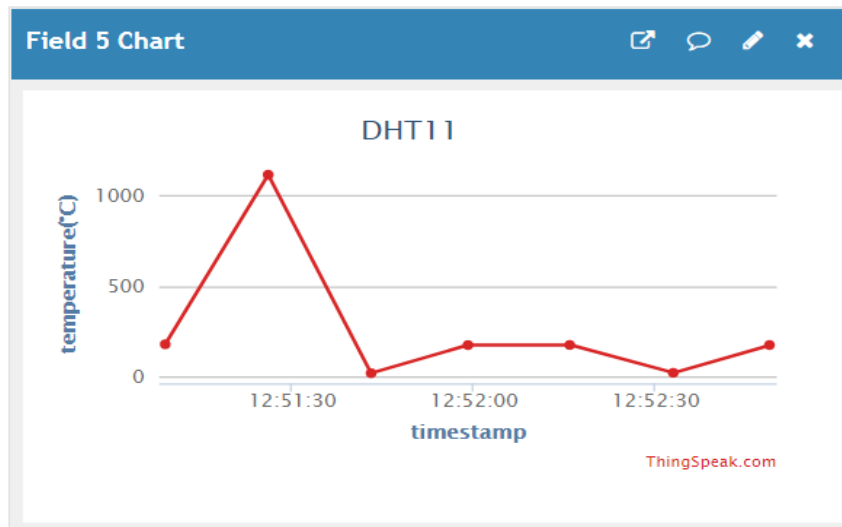
Channel Set

- **Percentage** cc channel. Enter channel.
- **Channel Name**
- **Description:** E
- **Field#:** Check channel can f
- **Metadata:** Ent
- **Tags:** Enter ke
- **Link to Extern** ThingSpeak c

Click the **Save Channel** button to create and save your channel.

Customizing Chart

The chart can be customized, go to your **Private View** tab and click on the edit icon.



Field 5 Chart Options

Title:	<input type="text" value="DHT11"/>	Timescale:	<input type="text" value=""/>
X-Axis:	<input type="text" value="timestamp"/>	Average:	<input type="text" value=""/>
Y-Axis:	<input type="text" value="temperature(°C)"/>	Median:	<input type="text" value=""/>
Color:	<input type="text" value="#d62020"/>	Sum:	<input type="text" value=""/>
Background:	<input type="text" value="#ffffff"/>	Rounding:	<input type="text" value=""/>
Type:	<input type="text" value="line"/>	Data Min:	<input type="text" value=""/>
Dynamic?:	<input type="text" value="true"/>	Data Max:	<input type="text" value=""/>
Days:	<input type="text" value=""/>	Y-Axis Min:	<input type="text" value=""/>
Results:	<input type="text" value="60"/>	Y-Axis Max:	<input type="text" value=""/>

Save

Cancel

API Key & channel ID

To send values from the ESP32 to ThingSpeak, you need the Write API Key.

Open your newly created channel and select the **API Keys** tab to copy your API Key.

