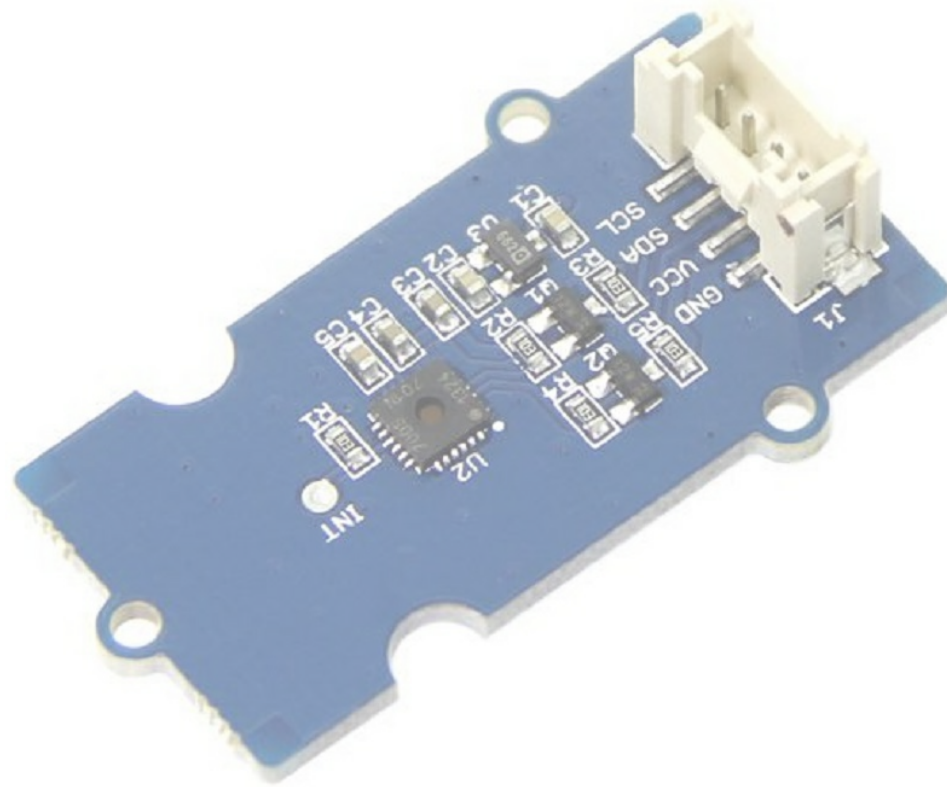


Grove - Temperature&Humidity Sensor (High-Accuracy &Mini) v1.0




This is a multifunctional sensor that gives you temperature and relative humidity information at the same time. It utilizes a TH02 sensor that can meet measurement needs of general purposes. It provides reliable readings when environment humidity condition in between 0-80% RH, and temperature condition in between 0-70°C, covering needs in most home and daily applications that don't contain extreme conditions.

Specifications

- Wide operating voltage range
 - (3.3V ~ 5V)
- Low Power Consumption
 - 350 μ A during RH conversion
- 0 to 100% RH operating range
- Measuring Range:
 - Humidity: 0% - 80% RH
 - Temperature: 0 ~ 70 °C
- Accuracy:
 - Humidity: \pm 4.5% RH
 - Temperature: \pm 0.5°C
- I2C host interface
- Excellent long term stability

Tip
More details about Grove modules please refer to [Grove System](#)

Platforms Supported

Arduino	Raspberry Pi		
			

Caution
The platforms mentioned above as supported is/are an indication of the module's software or theoretical compatibility. We only provide software library or code examples for Arduino platform in most cases. It is not possible to provide software library / demo code for all possible MCU platforms. Hence, users

Applications

- Industrial HVAC/R
- Thermostats/humidistats
- Micro-environments/data centers

Getting Started




Note

If this is the first time you work with Arduino, we firmly recommend you to see [Getting Started with Arduino](#) before the start.

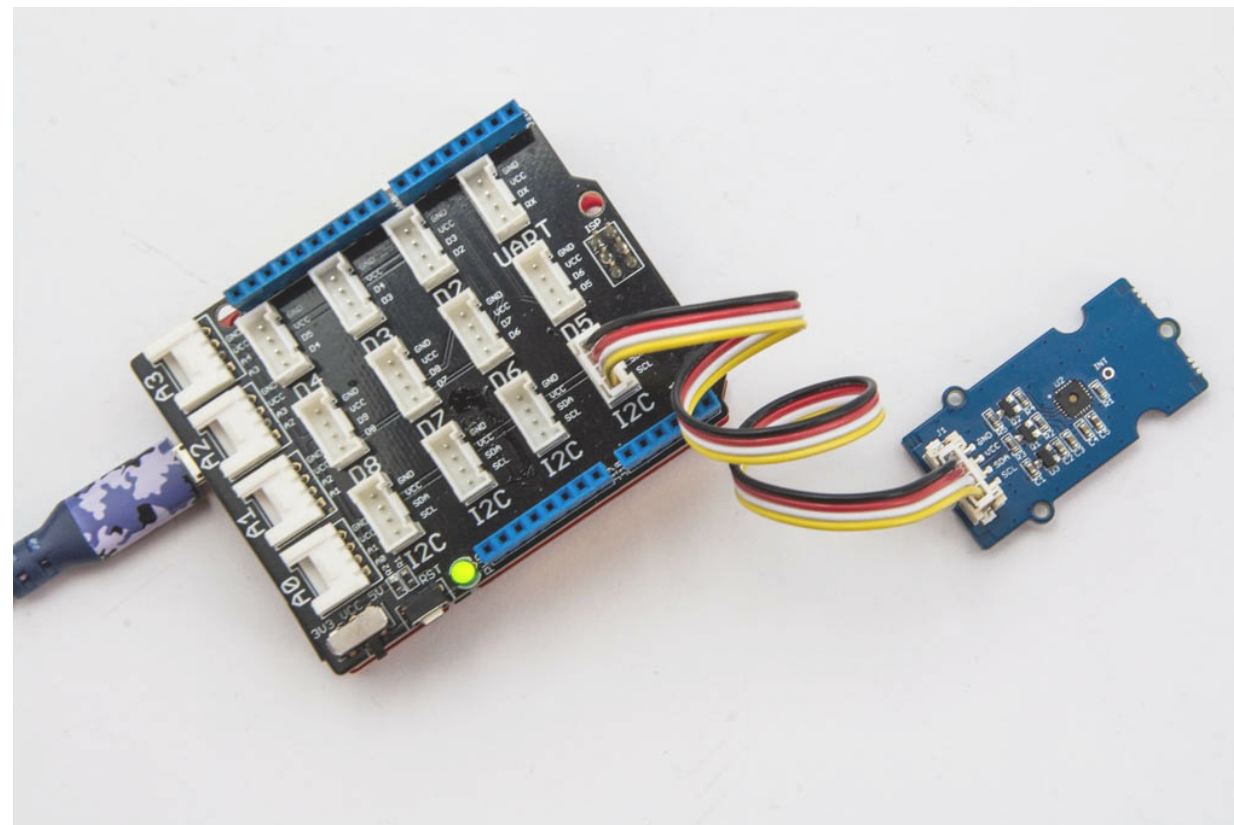
Play With Arduino

Hardware

- Step 1. Prepare the below stuffs:

Seeeduino V4.2	Base Shield	Temperature&Humidity Sensor
		
Get One Now	Get One Now	Get One Now

- Step 2. Connect Grove - Temperature&Humidity Sensor (High-Accuracy &Mini) v1.0 to I2C port of Grove-Base Shield.
- Step 3. Plug Grove - Base Shield into Seeeduino.
- Step 4. Connect Seeeduino to PC via a USB cable.



Note

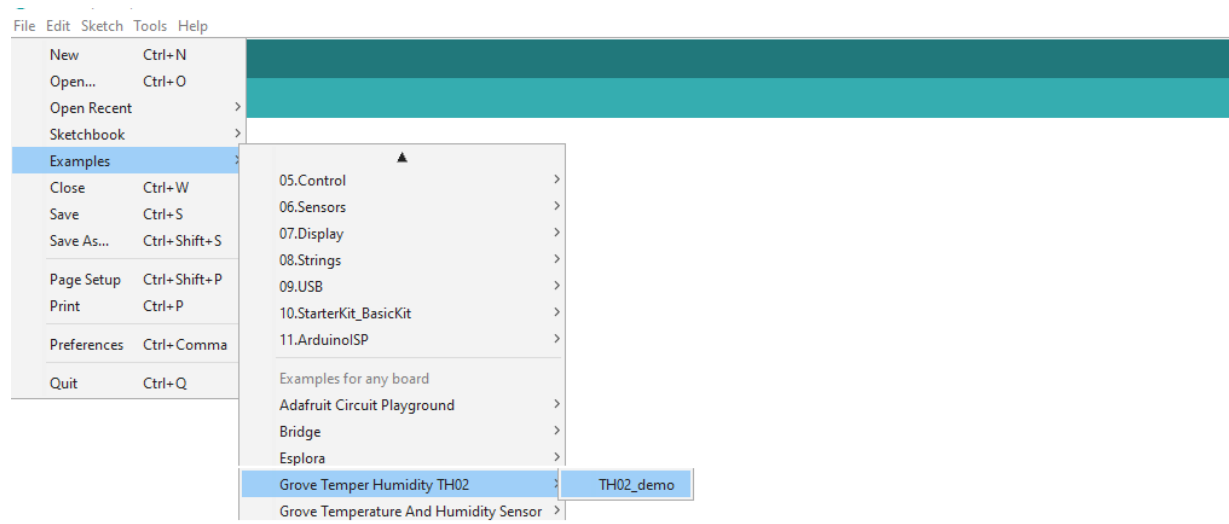
If we don't have Grove Base Shield, We also can directly connect Grove - Temperature and Humidity Sensor Pro to Seeeduino as below.

Seeeduino	Temperature&Humidity Sensor
5V	Red
GND	Black
SDA	White
SCL	Yellow

Software

- Step 1. Download the [Grove Temperature&Humidity TH02 library](#) from Github.
- Step 2. Refer [How to install library](#) to install library for Arduino.
- Step 3. Restart the Arduino IDE. Open "TH02_demo" example via the path: File → Examples → Grove Temper Humidity_TH02 → TH02_demo. Through this demo, we can

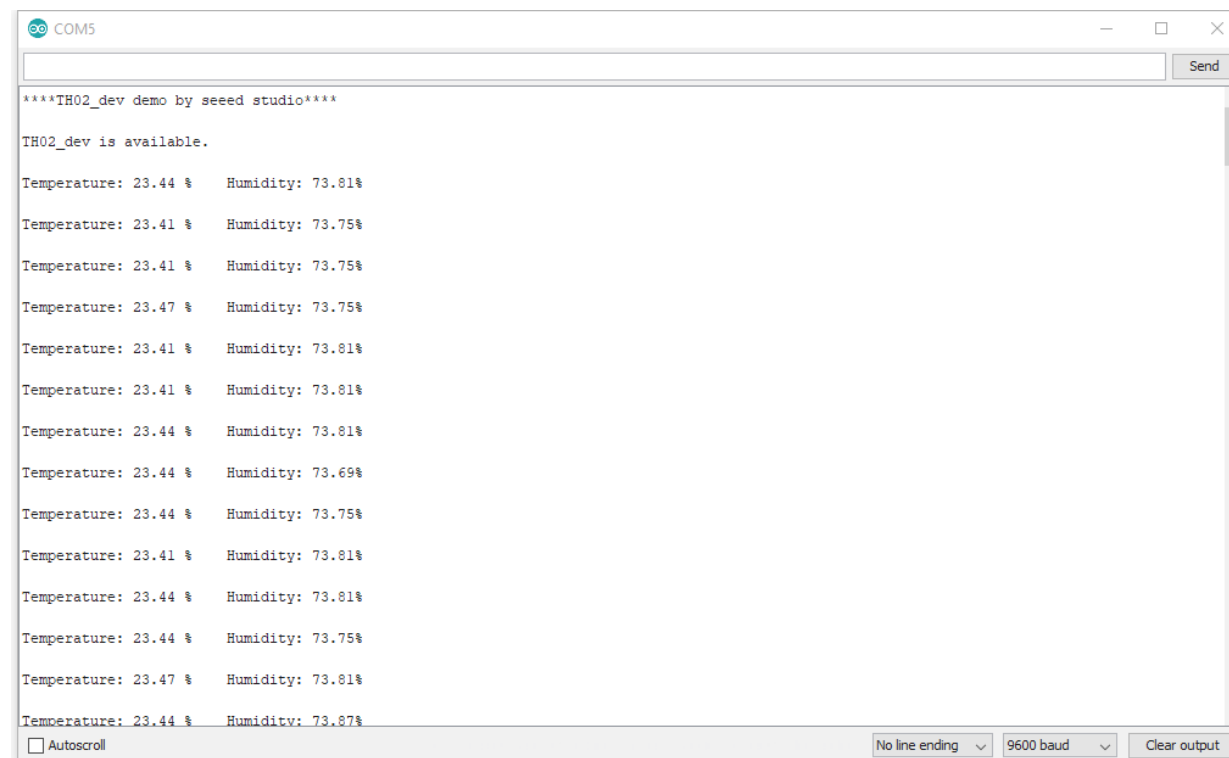
read the temperature and relative humidity information of the environment.



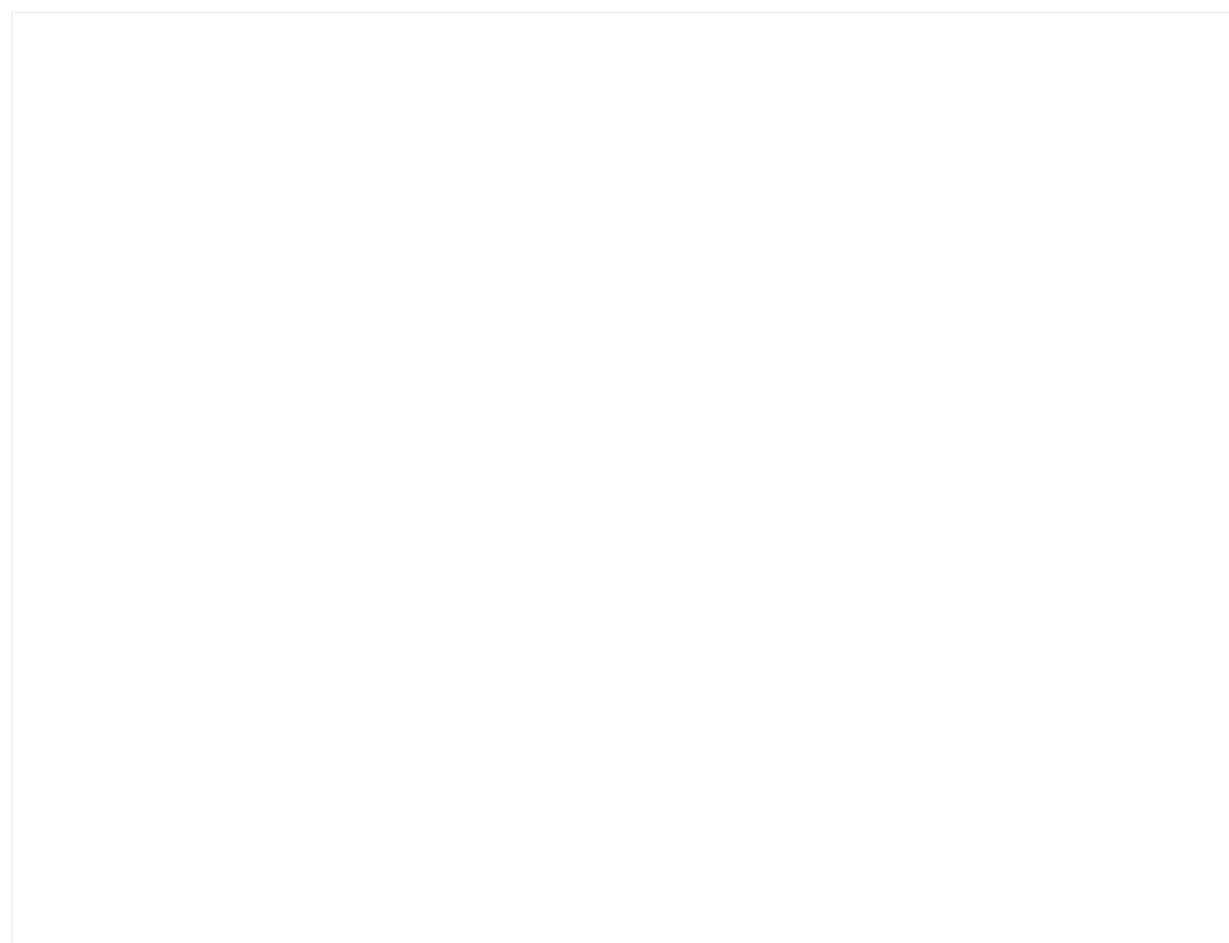
This demo is going to show you how to read temperature and humidity information from this Grove - Temperature&Humidity Sensor (High-Accuracy &Mini) Sensor.

- Step 4. Upload the demo. If you do not know how to upload the code, please check [how to upload code](#).
- Step 5. Open the Serial Monitor of Arduino IDE by click Tool-> Serial Monitor. Or tap the **Ctrl+Shift+M** key at the same time. if every thing goes well, you will get the temperature.

The result should be like:



Schematic Online Viewer



Resources

- [Zip] [Grove - Temperature&Humidity Sensor \(High-Accuracy & Mini\) V1.0 sch pcb](#)
- [PDF] [TH02_SENSOR.pdf](#)
- [Library] [Grove_Temper_Humidity_TH02 library](#)

