
Adafruitam2320 Library Documentation

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This is a CircuitPython driver for the AM2320 temperature and humidity sensor.

CHAPTER 1

Dependencies

This driver depends on:

- [Adafruit CircuitPython](#)

Please ensure all dependencies are available on the CircuitPython filesystem. This is easily achieved by downloading the [Adafruit library and driver bundle](#).

CHAPTER 2

Installing from PyPI

On supported GNU/Linux systems like the Raspberry Pi, you can install the driver locally [from PyPI](#). To install for current user:

```
pip3 install adafruit-circuitpython-am2320
```

To install system-wide (this may be required in some cases):

```
sudo pip3 install adafruit-circuitpython-am2320
```

To install in a virtual environment in your current project:

```
mkdir project-name && cd project-name
python3 -m venv .env
source .env/bin/activate
pip3 install adafruit-circuitpython-am2320
```


CHAPTER 3

Usage Example

See `am2320_simpletest.py` in the examples folder.

CHAPTER 4

Contributing

Contributions are welcome! Please read our [Code of Conduct](#) before contributing to help this project stay welcoming.

CHAPTER 5

Documentation

For information on building library documentation, please check out [this guide](#).

6.1 Simple test

Ensure your device works with this simple test.

Listing 1: examples/am2320_simpletest.py

```
1 # SPDX-FileCopyrightText: 2021 ladyada for Adafruit Industries
2 # SPDX-License-Identifier: MIT
3
4 import time
5 import board
6 import adafruit_am2320
7
8 # create the I2C shared bus
9 i2c = board.I2C() # uses board.SCL and board.SDA
10 am = adafruit_am2320.AM2320(i2c)
11
12 while True:
13     print("Temperature: ", am.temperature)
14     print("Humidity: ", am.relative_humidity)
15     time.sleep(2)
```

6.2 adafruit_am2320

This is a CircuitPython driver for the AM2320 temperature and humidity sensor.

- Author(s): Limor Fried

6.2.1 Implementation Notes

Hardware:

- Adafruit AM2320 Temperature & Humidity Sensor (Product ID: 3721)

Software and Dependencies:

- Adafruit CircuitPython firmware for the supported boards: <https://github.com/adafruit/circuitpython/releases>
- Adafruit's Bus Device library: https://github.com/adafruit/Adafruit_CircuitPython_BusDevice

class `adafruit_am2320.AM2320` (*i2c_bus*, *address=92*)
A driver for the AM2320 temperature and humidity sensor.

Parameters

- **`i2c_bus`** (*I2C*) – The I2C bus the AM2320 is connected to. This is the only required parameter.
- **`address`** (*int*) – (optional) The I2C address of the device. Defaults to 0x5C

Quickstart: Importing and using the AM2320

Here is an example of using the `AM2320` class. First you will need to import the libraries to use the sensor

```
import board
import adafruit_am2320
```

Once this is done you can define your `board.I2C` object and define your sensor object

```
i2c = board.I2C() # uses board.SCL and board.SDA
am = adafruit_am2320.AM2320(i2c)
```

Now you have access to the temperature using `temperature` attribute and the relative humidity using the `relative_humidity` attribute

```
temperature = am.temperature
relative_humidity = am.relative_humidity
```

`relative_humidity`

The measured relative humidity in percent.

`temperature`

The measured temperature in Celsius.

CHAPTER 7

Indices and tables

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