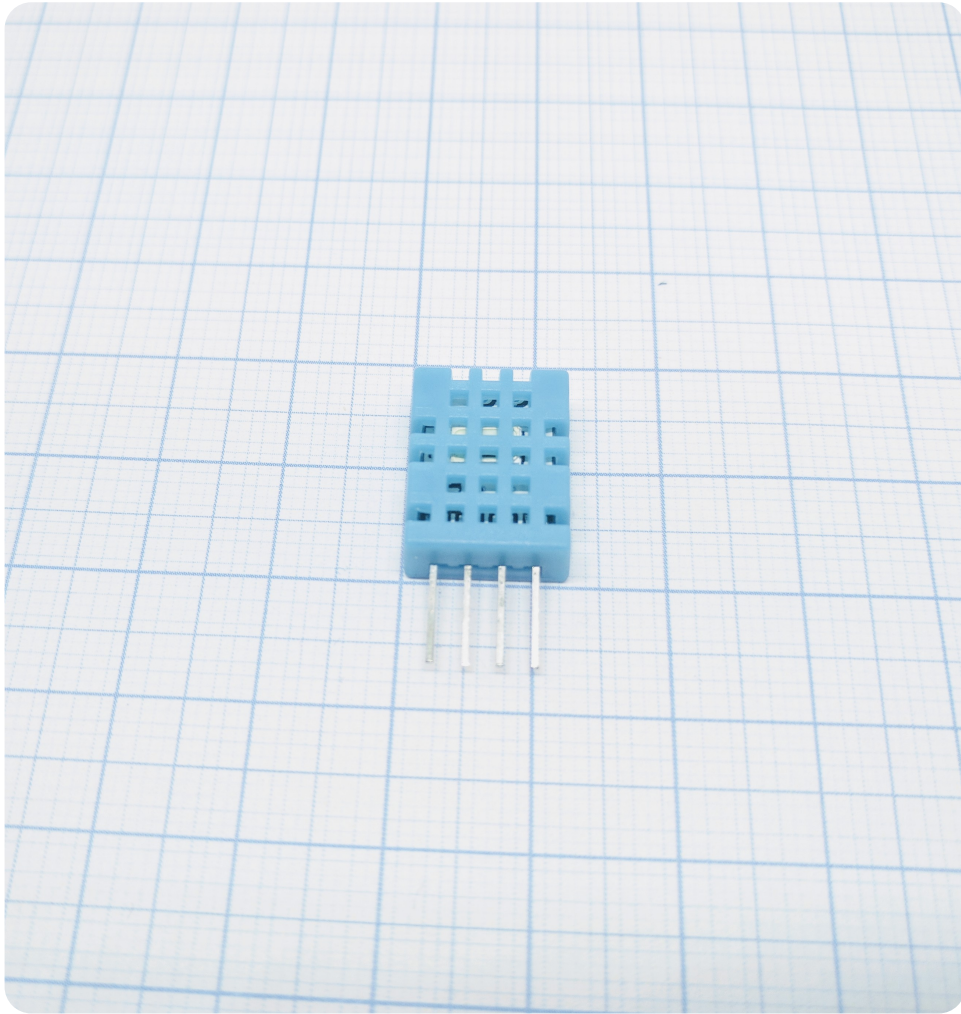


DHT11/DHT22

Environment - DHT11/12/22 SONOFF2301/7021 NORMAL



Introduction

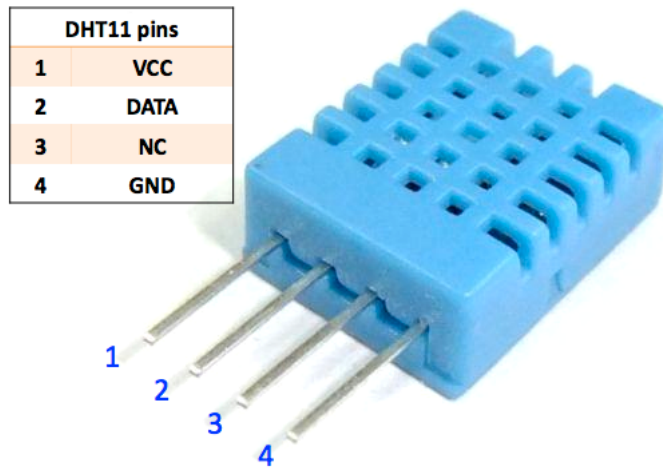
DHT11 and its sibling DHT22 are temperature and humidity sensors which using a custom 1-wire protocol. That means that they are not compatible with the same 1-wire bus as standard 1-wire units.

Specifications:

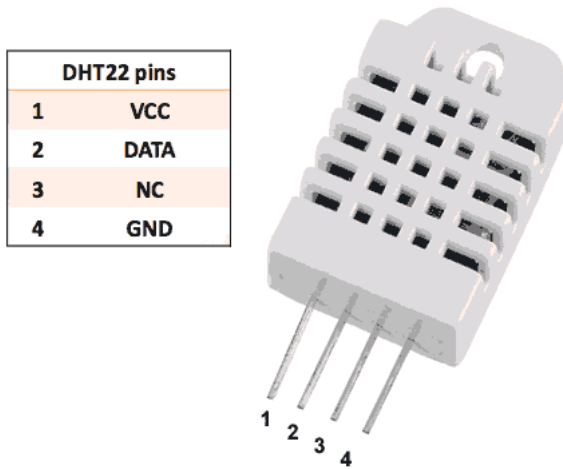
- Temperature (-40C to +85C)
- Humidity (0-100 % rel. humidity)

Wiring

The DHT sensor needs to be connected to a configurable GPIO on the ESP module. In case you have a simple ESP-01 module, it's best to use the GPIO-2 pin.



DHT11 (blue)



DHT22 (white)

ESP		DHT11/DHT22
GPIO (X)	<-->	Data (2nd pin)
Power		
5.0V	<-->	VCC (1st pin)
GND	<-->	GND (4th pin)

Note

Do not use GPIO 15 as an input for the DHT11/22. During startup of the ESP8266, this pin must be `LOW` for proper operation. It is good to avoid using GPIO 0 as an input as well. This pin must be `HIGHT` at startup, unless program mode is required. The data pin of the DHT11/22 needs a pull-up resistor. A value of 4.7k - 10k proves to be sufficient.

Setup

ESP Easy Mega: PulseCounter










Task Settings

Device: Environment - DHT11/12/22 SONOFF2301/7021  

Name:

Enabled: ☒

Sensor

GPIO ↔ Data:

Sensor model:

Data Acquisition

Send to Controller  ☒

Interval: [sec]

Values

#	Name	Formula 	Decimals
1	Celsius		1
2	RH		0

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Task settings

- **Device:** Name of plugin
- **Name:** Name of the task (example name **DHT**)
- **Enable:** Should the task be enabled or not

Sensor

- **GPIO ↔ Data:** Pulse input is generally set to **GPIO 14 (D5)**.
- **Sensor model:** Pick your **sensor model**, either DHT11 or DHT22.

Data acquisition

- **Send to controller** 1..3: Check which controller (if any) you want to publish to. All or no controller can be used.
- **Interval:** How often should the task publish its value (5..15 seconds is normal).

Indicators (recommended settings)

Indicator	Value Name	Interval	Decimals	Extra information
Temperature	Celsius	10	1	
Humidity	RH	10	1	

Rules examples

```
On DHT#Celsius Do
  If [DHT#Celsius]>-15
    NeoPixelAll,255,0,0 //Red light
  Else
    NeoPixelAll,0,255,0 //Green light
  EndIf
EndOn
```

Where to buy

Store	Link
AliExpress	Link 1 (\$) DHT11 (http://s.click.aliexpress.com/e/Rw9LhDW) Link 2 (\$) DHT22 (http://s.click.aliexpress.com/e/bym03SW8)
Banggood	Link 3 (\$) DHT11 (https://www.banggood.com/KY-015-DHT11-Temperature-Humidity-Sensor-Module-For-Arduino-p-916173.html?p=V327042Arduino-SCM-p-937403.html?p=V3270422659778201806)
eBay	Link 5 (\$) DHT11 (https://rover.ebay.com/rover/1/711-53200-19255-0/1?icep_id=114&ipn=icep&toolid=20004&campid=5338336929&mpre=https%3A%2F%2Fwww.ebay.com%2Fsch%2Ffi.html%3F_from%3DR40%2 Link 6 (\$) DHT22 (https://rover.ebay.com/rover/1/711-53200-19255-0/1?icep_id=114&ipn=icep&toolid=20004&campid=5338336929&mpre=https%3A%2F%2Fwww.ebay.com%2Fsch%2Ffi.html%3F_from%3DR40%2

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