

MCU temperature and humidity sensor [HuTemp]

It contains an integrated ESP8266 chip which offers a complete wireless network solution in a compact version of the ESP-01 module cooperating in combination with various digital sensors such as DHT11, DHT22 or DS12B20 enabling sensing of ambient temperature and humidity.

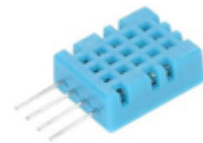
ESP-01 module parameters:

- Integrated 32-bit RISC processor
- 802.11 b/g/n wireless standards
- encryption and security of WEP, WPA, WPA2, TKIP, AES
- integrated TCP/IP stack
- QOS management & I2S interface



DHT11 sensor parameters:

- operating voltage: 3 - 3.6V DC
- temperature measuring range: 0 - + 50 °C
- temperature measurement accuracy: ± 2 °C
- relative humidity measuring range: 20 - 90%
- accuracy of relative humidity measurement: $\pm 5\%$



DHT22 sensor parameters:

- operating voltage: 3.3 - 6V DC
- temperature measuring range: -40 - +80°C
- temperature measurement accuracy: $\pm 0,5$ °C
- relative humidity measuring range: 0 - 100%
- accuracy of relative humidity measurement: $\pm 2\%$



DS18B20 sensor parameters:

- operating voltage: 3 - 5.5V DC
- temperature measuring range: -55 - +125°C
- temperature measurement accuracy: $\pm 0.5 - 2$ °C



HuTemp model provides:

- temperature and humidity sensor with integrated web interface
 - Processor 80-160MHz (Xtensa LX106) 32bit
 - Storage 1MB QSPI
 - Wireless network (10/100/150Mbps)
- Certified EPS switching mains power supply
 - AC/DC power supply 110/230V => 5V/1,2A (6W)
 - Consumption 0.5W
- Universal plastic case
 - width 40mm
 - height 66mm
 - depth 40mm
- All Components have been tested by the FCC



Weather Sensor Report

Temperature: 35 'C

Humidity: 15 %

<http://hutemp.doit.sk>