

WiFi temperature, relative humidity, CO2 and atmospheric pressure sensor with integrated probe

code: W4710



Sensors with WiFi interface are designed to measure the temperature, relative humidity, CO2 and atmospheric pressure with a connected probe (included in delivery).

Communication with the sensor is done via a wireless WiFi network. The device allows sending measured values to the online [COMET Cloud](#) (with the shortest interval of 5 minutes) or into [COMET Database](#). The values can be displayed on integrated web pages and provided to third party systems using the Modbus TCP protocol. The measured values are displayed on the LCD display.

The device continuously evaluates the alarm limits of the measured values and in case of exceeding them, it can send an e-mail or inform by means of acoustic or optical signaling. Two alarm limits are supported for each measurement channel.

The main advantage of sensors with WiFi interface is the simplicity of deployment in places where WiFi infrastructure is already available. Just place the sensor in the desired location and connect it to the WiFi network. WiFi sensor in conjunction with [COMET Cloud](#) or [COMET Database](#) offers a comprehensive solution for monitoring and alarm without the need for a server solution on the part of the user. If necessary, however, the sensor can also be connected to third-party systems, either using the Modbus TCP protocol or by sending JSON data to an http server.

Thanks to these unique features, the WiFi sensor will find applications and a wide range of application areas.

Technical data

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| TEMPERATURE SENSOR | |
| Measuring range | -30 to +60 °C |
| Accuracy | ±0.4 °C |
| Resolution | 0.1 °C |
| HUMIDITY SENSOR | |
| Measuring range | 0 to 95 % RH |
| Accuracy | ±1.8 % RH from 0 to 90 % at 23 °C |
| Resolution | 0.1% RH |
| DEW POINT | |
| Measuring range | -60 to +60 °C |
| Accuracy | ±1.5 °C at ambient temperature T <25 °C and RH >30 % |
| Resolution | 0.1 °C |
| CO2 SENSOR | |
| Measuring range | 0 to 5000 ppm |
| Accuracy | ±(50ppm +3% from reading) at 25°C and 1013hPa |
| Resolution | 1 ppm |

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|------------------------------------|--|
| ATMOSPHERIC PRESSURE SENSOR SENSOR | |
| Measuring range | 700 to 1100 hPa |
| Accuracy | ±1.3 hPa at 23 °C from 800 to 1100 hPa |
| Resolution | 0.1 hPa |
| GENERAL TECHNICAL DATA | |
| Operating temperature | -30 to +60 °C |
| Channels | sensor of temperature, humidity sensor, CO2 and atmospheric pressure |
| Measuring interval | 1 s |
| Sending interval to COMET Cloud | adjustable 5 minutes to 12 hours |
| Communication protocols | HTTP(S), SMTP, ModbusTCP, HTTP POST |
| Alarm signalization | e-mail, acoustic, LED |
| Power | 5.0 to 5.4 VDC; consumption 150 mA (max. 500 mA); USB-C connector |
| Radio section | frequency: 2.4 GHz; max. transmit power: 18 dBm; standard: IEEE 802.11 b/g/n; contain CC3220MODSF with FCC ID: Z64-CC3220MOD |
| Protection class | IP30 |
| Dimensions | 156 x 93 x 32 mm |
| Weight | 125 g |
| Warranty | 3 years |