

WiSensorTh-CO₂

Temperature, Humidity and CO₂ Wi-Fi Trasmmitter Sensor,
802.11 b/g/n, Bluetooth

Ordering Code: SOL-TH-CO₂-B1-S01-S

PRODUCT OVERVIEW

The WiSensorTh-CO₂ is a Wi-Fi sensor capable of reporting sensor data back to the host server. This sensor is built upon the standard 802.11 b/g/n wireless infrastructure, making it easier to monitor and track the sensor readings.

The WiSensorTh-CO₂ contains a very sensible temperature and humidity sensor and an accurate CO₂ (Carbon dioxide) sensor.

It has a complete Bluetooth 4.0 stack on board.

The WiSensorTh-CO₂ has a complete TCP/IP stack on board and supports secure Wi-Fi authentication using WPA2-PSK, WPA and WEP encryption.

READY IN FEWS STEPS

The Kit is ready to communicate and collect values in a few simple steps. Just power on with a voltage 9Vdc, configure it by a web interface and data read from sensor will be immediately available on Wi-Fi and Bluetooth.

READY FOR CLOUD

WiSensorTh-CO₂ module is ready to cloud functionalities. In a few steps customer can configure the module to communicate with a server on the Internet and being always reachable from it.

WIICOM SENSE CLOUD

From this time all operations can be done through connecting Wiicom Sense Cloud server, with a common browser, navigating into an easy web interface.

Through this interface it's possibile to monitor all sensors installed, to create stats and charts and to make weekly or daily reports and send them by email.

Wiicom Sense Cloud phylosophy allows customers to connect in every moment and in every place, and have real-time informations about all installed sensors.



DATA CAPTURE

All data captured from sensors are directly acquired by the WiSensorTh-CO₂ and sent to Wiicom Sense Cloud or to another server, configurable by user.

Data reading frequency is also configurable by user through a web interface.

FEATURES

- 132 x 34 x 67 mm plastic enclosure
- Measures temperature, humidity and CO₂
- Data Collection on custom data server
- Configurable monitoring frequency
- Easy sensor set-up and monitoring using PC browser
- Data collection on Wiicom Sense Cloud

EASY CONFIGURATION

This module is fully configurable in an easy way: with the configurator it's possible to set Wi-Fi network parameters and timing parameters for data transfer on sensors.

APPLICATIONS

Environmental monitoring

Remote control

Smart energy

Agricultural applications

Building automation

TH SENSOR PROPERTIES: Sensirion SHT21	
Humidity measurement range	0 to 100 %RH
Temperature measurement range	-40 °C to +85 °C
Humidity Accuracy	+/- 3.0 %RH
Temperature accuracy	+/- 0.3 °C
Humidity Repeatability	+/- 0.1 %RH
Temperature Repeatability	+/- 0.1 °C

CO2 SENSOR PROPERTIES: GGS CO2 Cozir	
Operating Principle	Non-dispersive infrared (NDIR)
Measurement range CO2	0 to 2000 ppm
Accuracy	+/- 50 ppm + 3% of reading
Response time	2 minutes by 90%
Operation temperature range	0 to 50 °C
Operation humidity range	0 to 95% RH (non-condensing)

RF CHARACTERISTICS	
WLAN - Bluetooth Functions	Ad-hoc and Infrastructure modes, Bluetooth 4.0
Network Standard Support	IEEE 802.11b/g/n dual-band (2.4Ghz and 5Ghz)
RF Data Rates	802.11n: 6.5, 13, 19.5, 26, 39, 52, 58.5, 65 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps
RF Frequency Band	2.4 - 5 GHz (integrated antenna)
Security Protocol	WEP, WPA and WPA2-PSK
NetworkProtocols	TCP, IPv4, ARP, ICMP

POWER SUPPLY	
Supply Voltage	9 Vdc 1A through power supply 220Vac to 9Vdc

EXTERNAL BEHAVIOR	
Dimension	132 x 34 x 67 mm (L x W x P)
Behavior	ABS

PRODUCT SUPPORT

The WiSensorTh-CO2 can be used in a wide range of applications in the areas of environmental monitoring, remote control and smart energy applications. Wiicom product are distributed in all countries in Europe. For additional information, please visit www.wiicom.it or contact directly our web customer support.