

## SENSOR PROPERTIES

Operating Principle	Non-dispersive infrared (NDIR)
Measurement range CO <sub>2</sub>	400 to 2000 ppm
Accuracy	+/- 70 ppm + 3% of reading
Response time	2 minutes by 90%
Operation temperature range	0 to 50 °C
Operation humidity range	0 to 85% RH (non-condensing)
Life expectancy	15+ years

## POWER SUPPLY

Voltage	5V
Consumption	RX = 56mA, TX = 160mA
Sensor supply Current, IDD in measuring	Minimum 200uA, typical 300uA, max 330 uA

## RF CHARACTERISTICS

WLAN Functions	Ad-hoc and Infrastructure modes
Network Standard Support	IEEE 802.11b/g single stream n
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 Output Power	15-17 dBm
RF Frequency Band	2.412 - 2.484 GHz (integrated antenna)
Security Protocol	WEP, WPA and WPA2-PSK
NetworkProtocols	TCP, IPv4, ARP, ICMP

## EXTERNAL BEHAVIOR

Dimension	69 x 50 x 20 mm
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## ADDITIONAL INFORMATION

To a more complete explanation about CO<sub>2</sub>-WiFi-Kit please refer to Compact-S-UART brief presentation, available on [www.wiicom.it/compact-s](http://www.wiicom.it/compact-s) and SenseAir S8 board data sheet, available on <http://www.senseair.se/products/oem-modules/senseair-s8/>

## PRODUCT SUPPORT

The CO<sub>2</sub>-WiFi-Kit can be used in a limitless range of applications in the areas of environmental monitoring, remote control and smart energy applications.

Wiicom products are distributed in all countries in Europe. For additional information, please visit [www.wiicom.it](http://www.wiicom.it) or contact directly our web customer support.

# CO<sub>2</sub>-WiFi-Kit

CO<sub>2</sub> Wi-Fi Transmitter Kit, 802.11 b/g/n, CO<sub>2</sub> Sensor, SenseAir Engine  
Ordering Code: SOL-CO<sub>2</sub>-KIT-S01-s

## PRODUCT OVERVIEW

The CO<sub>2</sub>-WiFi-Kit is a bundle designed to transmit environmental CO<sub>2</sub> (Carbon dioxide) values, over an 802.11 b/g/n Wi-Fi network.

Kit is composed by:

- 1 Compact-S-UART module with a custom firmware
- 1 Sense Air Engine CO<sub>2</sub> sensor
- 1 Wiicom Kit-Power-Sensor
- 1 data cable
- 1 power cable

## READY IN FEW STEPS

Compact-S-UART module is immediately ready to receive values incoming from SenseAir CO<sub>2</sub> sensor.

Thanks to Kit-Power-Sensor PCB provided by Wiicom, the connection to Wi-Fi module is quick and easy.

Just power on the module with a voltage of 5V and data read from sensor will be immediately available on Wi-Fi.

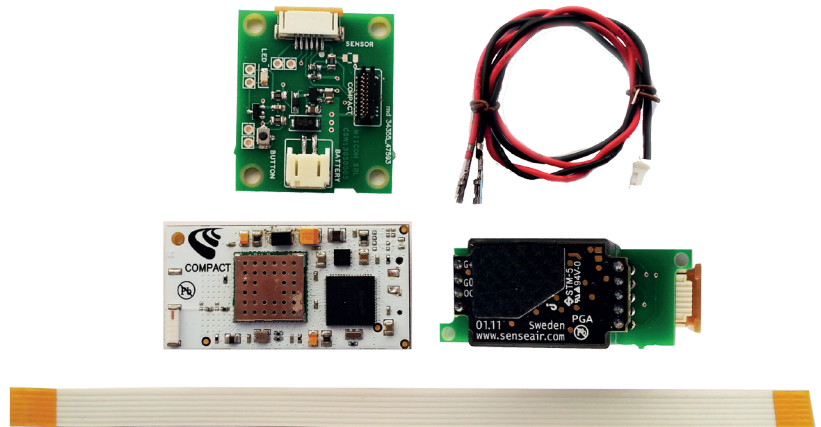
## CLOUD FUNCTIONALITIES

CO<sub>2</sub>-WiFi-Kit 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.

From this time all operations can be done through connecting Sense Cloud server, with a common browser, navigating into an easy web interface. Through this interface it's possible to monitor all sensors installed, to create stats and charts and to make weekly or daily reports and send them by email.

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



## FEATURES

- Easy way to access to data
- Real-time CO<sub>2</sub> measure
- Ultra Low power design
- Easy sensor set-up and monitoring using PC browser
- Data collection on Wiicom Sense Cloud

## DATA CAPTURE

All data captured from sensors are directly acquired by the CO<sub>2</sub>-WiFi-Kit and sent to 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