

SENSOR PROPERTIES

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
Humidity Long Term Drift	< 0.5 %RH/yr
Temperature Long Term Drift	< 0.04 °C/yr

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 Th-WiFi-I2C-Kit please refer to Compact-I2C presentation, available on www.wiicom.it and I2c module data sheet, available on <http://www.sensirion.com/products/humidity-temperature/humidity-sensor-sht21>.

PRODUCT SUPPORT

The Th-WiFi-I2C-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 or contact directly our web customer support.

Th-WiFi-I2C-Kit

Temperature and Humidity Wi-Fi Trasmmitter Kit, 802.11 b/g/n
Ordering Code: SOL-TH-Kit-S01

PRODUCT OVERVIEW

Th-WiFi-I2C-Kit is a bundle designed to transmit environmental values of temperature and humidity over a 802.11 b / g / n Wi-Fi network.

The Kit is composed of:

- a Compact-I2C module
- a Sensirion SHT21 sensor mounted over a Wiicom PCB
- a power and data cable

READY IN FEW STEPS

The Compact-I2C module is immediatly ready to recipe values incoming from SHT21 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 immediatly available on Wi-Fi.

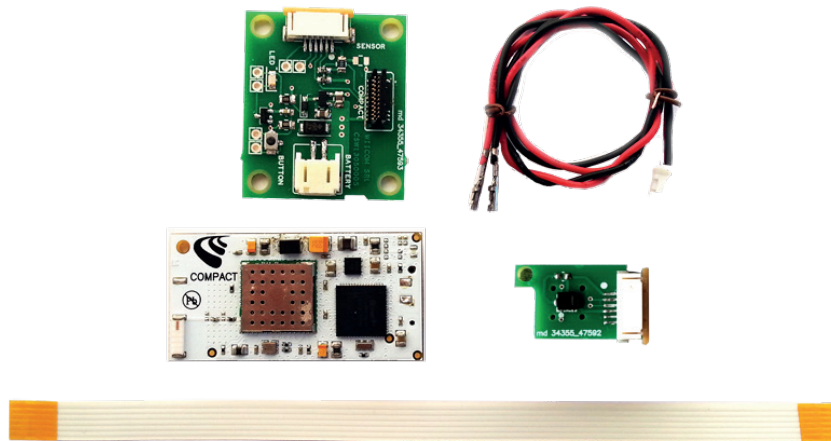
CLOUD FUNCTIONALITIES

Th-WiFi-I2C-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 connection to 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.

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



FEATURES

- Measures temperature and humidity
- Interface the I2c Sensirion SHT21 module
- 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 Th-WiFi-I2C-Kit and sent to 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