

SENSOR PROPERTIES

Temperature measurement range	-20°C to +60°C
Humidity measurement range	0 to 100 %RH
Internal resolution	+/- 0.5 °C
Temperature accuracy	+/- 1.0 °C
Humidity accuracy	+/- 3.0 %RH
Logging interval	1s to 1hr
Transmission interval	User defined
Memory on board	32Mbits, greater than 500.000 data set entries
Operating temperature range	-20°C to +60°C

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
Network Protocols	TCP, IPv4, ARP, ICMP

POWER SUPPLY

RUN mode, Radio ON	RX = 56mA, TX = 160mA
Supply Voltage	5 Vdc

EXTERNAL BEHAVIOR

Dimension	80 x 30 x 10 mm
Behavior	ABS

ADDITIONAL INFORMATION

To a more complete explanation about WiSensorTh please refer to Compact-S-UART brief presentation, available on www.wiicom.it/compact-s.

PRODUCT SUPPORT

The WiSensorTh 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.

WiSensorTh

802.11 b/g/n Ultra low power, Temperature-humidity Sensor
Ordering Code: SOL-TH-B1-S01-S

PRODUCT OVERVIEW

The WiSensorTh is a battery powered 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 contains an temperature and humidity sensor very sensible.

It is designed for ultra-low power applications. It is powered by standard rechargeable batteries. Due to its low power design, it can last for two years (when programmed to wake up from sleep every minute).

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

READY FOR CLOUD

WiSensorTh 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 possible 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.



FEATURES

- 8 x 10 x 3 cm plastic enclosure
- Measures temperature and humidity
- Removables lithium polymer batteries AA type
- Offline data logging: sensor memory stores all data even if WiFi is temporarily disconnected
- Ultra Low power design: greater than 2 year of battery life (waking up from sleep every minute)
- 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 WiSensorTh 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 (refer to Compact-S configuration) and timing parameters for data transfer on sensors.

APPLICATIONS

Environmental monitoring

Remote control

Smart energy

Agricultural applications

Building automation