



THM001W Cloud Base Data logger

Basic Description

The on-board Temperature sensor on **THM001W** use integrated capacitive humidity sensing components and band-gap temperature sensing components measure temperature very accurately.

Features of THM001W

- Accurate temperature from (-10°C to 60°C) ± 0.3
- Increased accuracy by user calibration to $\pm 0.25^\circ \text{C}$ ($\pm 0.45^\circ \text{F}$).
- Rechargeable 3.7v Battery
- Communication protocol Wi-Fi.



Smart Systems cloud gives Real time information about Temperature, Battery status, and Wi-Fi when **device** configured on it. The device sends Alerts in the form of email/message also alert generate sound on monitoring cloud as well.

How it Works

The THM001W outputs the ambient and extreme temperature in degrees Fahrenheit. The device is programmed to sleep for a user-given time interval and then wakeup, send power to the Sensor and wait for it to stabilize and mathematically compute the temperature and transmit the data to the Smart Systems cloud. THM001W have ability to store data when Wi-Fi communication is lost, and store data send to the cloud when the connection established.

THM001W Specifications

This Wi-Fi-enabled temperature and humidity **data logger** can remotely monitor an environment over a -10 to +60°C (14 to +140°F) and 0 to 100% RH measurement range.

- **Wireless Range:** 250 - 300 ft. (non-line-of-sight / indoors through walls, ceilings & floors)
- **Power: Rechargeable** battery (optimized for long battery life, line-power and solar (Industrial only) options are available) Actual range may vary depending on environment.
- **Battery life** is determined by device reporting frequency and other variables.



Smart Systems Cloud

Our packages

The Smart Systems Cloud is the central operating system of the all Smart Systems data loggers. Here, you can configure all of your Wi-Fi data loggers, set measurement limit alarms, and analyze measurement data. You must first register at <https://cloud.smart-systemz.com> to have access to the Smart Systems Cloud.

	Basic	Advanced
Measuring cycle	15 min. to 24 h	1 min. to 24 h (selectable)
Communication cycle	15 min. to 24 h	1 min. to 24 h (selectable)
Data storage	Max. 3 months	Max. 2 years
Reports	Manual (.pdf/.csv)	Manual (.pdf/.csv) Automatic (.pdf/.csv)
Data analysis	1 measurement channel	Up to 10 measurement channels simultaneously
Number of users per account	1	10
Number of Wi-Fi data loggers per account	Unlimited	Unlimited
Alarm options	Upper/lower alarm limits	<ul style="list-style-type: none"> • Upper/lower alarm limits • Alarm delay • Time control of alarms
System notifications	<ul style="list-style-type: none"> • Low battery notification • Radio link interrupted • Power supply interrupted 	<ul style="list-style-type: none"> • Low battery notification • Radio link interrupted • Power supply interrupted
Email alarm	Yes	Yes
Text message alarm	No	<ul style="list-style-type: none"> • Incl. 25 text msgs per logger per year • More SMS packages purchaseable

Depending on the range of functions you require, you can choose from the free Basic version, or the more extensive Advanced version. Access to an API interface is available in order to export measurement data to your systems.

Technical Details

Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.1µA (sleep mode) 2mA (radio idle/off mode) 20A (measurement mode) 150 mA (radio RX mode) 35 mA (radio TX mode)
Operating Temperature Range	-7°C to +60°C (20°F to +140°F)**
Optimal Battery Temperature Range (Coin Cell)	+10°C to +50°C (+50°F to +122°F)
Temperature Range of Device	-10°C to +60°C (14°F to +140°F)
Humidity Range of Device	0 to 100% RH (+/-2%)
Accuracy @ 25°C	+/- 1% (1° C or 1.8° F)
User Calibrated Accuracy	+/- 0.25° C (± 0.45° F)
Time Constant @ 25°C	30 sec
Weight	2.5oz.
Wireless Range	250 - 300 ft. (Through walls, ceilings and floors) Range may vary according to environmental variables.

Steps to Connect THM001W to Internet

- Power the Device using battery and press reset
- Button.
- Use mobile or laptop and open Wi-Fi point.
- Connect with the name THM001W.
- Configuration the Portal popup.
- Click on configure Wi-Fi.
- Select your Wi-Fi and enter password.
- After right password the device is connected to
- Internet.

Configure device on portal

- Login on smart-systemzCloud.com
- Click on Add device
- Set the device name and other Information
- Click submit.

Notes

Commercial Grade Sensors

Monitor commercial grade sensors are designed for applications in ordinary environments (normal room temperature, humidity and atmospheric pressure). Do not use these sensors under the following conditions as these factors can deteriorate the product characteristics and cause failures and burn-out.

- Corrosive gas or deoxidizing gas - chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxides gas, etc.).
- Volatile or flammable gas.
- Dusty conditions.
- Under low or high pressure.
- Wet or excessively humid locations.
- Places with salt water, oils chemical liquids or organic solvents.
- Where there are excessively strong vibrations.
- Other places where similar hazardous conditions exist.

Use these products within the specified temperature range. Higher temperature may cause deterioration of the characteristics or the material quality.



Smart Systemz
www.smart-systemz.com