印刷成品尺寸 75x55 mm
翻页成品尺寸 75x55 mm

MOCREO®

ST5 Temperature Sensor

User Manual

Contents

Introduction 2
What's in the Box 3
Product Parameter 3
Setup 5
Installation 10
Test the Effective Distance 11
How the System Works 12
Battery 14
Calibration 15
Configuration 16
Troubleshooting 17
Warranty 19
Costumer Service 20
Disclaimer 20
FCC Statement 21

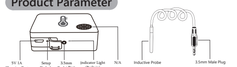
Introduction

- With 4.9ft waterproof external probe for extreme conditions, which can detect and record ambient temperature in real-time.
- Detectable Temperature Range: -40°F ~ 257°F
- Three Alarm Methods: E-Mail Alert, App Push Notification, Hub Beeping.
- ST5 Sensor is suitable for refrigerator/freezer, hot tub, fish tank, pet cage, or other scenes.
- Take the example of monitoring the temperature of freezer. Please place the ST5 Sensor's Data Logger outside the freezer and place the probe inside the freezer to ensure that they are reliable.

What's in the Box



Product Parameter



Specifications

Model	ST5
Wireless Connection	Bluetooth
Communication Range	131ft/40m (No Obstacles)
Dimensions	2.4 X 2.4 X0.7inch (L x W x H)
Weight (Including probe)	83g
Battery (Rechargeable)	3.7V 1800mAh Lithium Battery
Size of Stainless Steel Shell	6 mm in diameter
Cable Length	1.5m
Cable Cross Section	4mm x 1.3mm
Probe Measuring Rage	-40°F ~ 257°F (-40°C ~ 125°C)
Temperature Accuracy	±0.9°F (In the range of 14°F to 185°F)

Setup

1 Download MOCREO App

Search "MOCREO Sensor" on Google Play/App Store or scan the QR Code below to download the MOCREO Sensor App and register a MOCREO account on the App Before adding Sensors, Please ensure that the Hub is successfully bound. If you have not setup a Hub, please consult the Hub Manual or ST5 Temperature Sensors Kit Manual to setup the Hub.

Google Play App Store MOCREO App

2 Setup Tutorial

3 Turn on the Bluetooth

Make sure the Bluetooth is ON during the whole setup process. For Android, please also enable GPS and agree to grant location permissions.

4 Sensor Joins the Hub

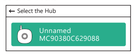
Tap the [+] Button at the upper right of the MOCREO Home Page and select 'Temp Sensor -ST5' (Please ensure that the Hub is successfully bound) .



Note:

- Please make sure the Bluetooth of your mobile device (smart phone/ tablet) is enabled during the whole setup process.
- The Bluetooth and GPS can be turned off after the Sensor setup is complete.

5 Select the Hub



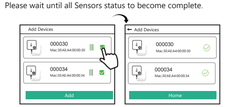
6 Poke the Sensor

Poke the Sensor pinhole with a pin for 1s and release, then the indicator light of Sensor will flash (Please complete this operation within 60 seconds, and you can add up to 10 Sensors at a time).



7 Add the Sensor

Select the Sensor you want to add and click on the "Add Button" (up to 10 devices can be added at a time). When the ◌ appears on the Sensor card, it means the Sensor is successfully added. Please wait until all Sensors status to become complete.



Installation

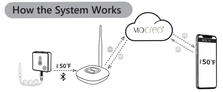
1. Place place the Hub at a relatively high position. The suggested distance between the Hub and Sensor is within 131ft (No obstacles, signal value stronger than 20% is ideal).
2. Please make sure the Sensor probe was inserted firmly (Note: ST5 probe is waterproof but the Sensor Data Logger is not).
3. Paste the Data Logger on the outside of refrigerator and place the probe inside.



Test the Effectve Distance

- Place the paired ST5 Sensor in the location you want to monitor. The suggested distance between the Hub and Sensor is within 67ft-82ft (Household environment)
- Poke the Sensor pinhole for 1s and release.
- After 20~30 seconds, Tap the corresponding Sensor card on the App to reach the Sensor Settings Page and view the signal value, signal value stronger than 20% is ideal.

How the System Works



The ST5 Sensors use Bluetooth LE to communicate with the Hub. Therefore, the distance are limited to a Bluetooth range centered on the Hub(e.g., around the house).

This range is affected by distance and obstacles such as walls, windows, water, radio interference, etc. In short, longer distances and more obstacles mean weaker signals.

The MOCREO Hub uses a local Wi-Fi (2.4GHz only) or Ethernet to transmit data from the MOCREO Sensors in range to the Internet. A cellular hotspot with Wi-Fi or Ethernet capability can also be used to provide Internet access. Then, the MOCREO App can be used to view your device data from anywhere in the world.

Battery

- ST5 Sensor built- in 1800mAh rechargeable lithium battery.
- The battery can last up to 2 years before it needs to be charged again.
- Please charge the Sensor with a Micro USB Cable and a 5V 1A power adapter.
- The battery percentage can be checked on the App: Sensor Settings Page>Battery Level (Please do not check the battery level while the device is charging).
- When charging, the red indicator light will stay on and when the red indicator light goes off it means charging is complete.
- Low battery alert will be triggered when the battery is below 10% (Including Email alerts and APP notification).

Calibration

- When the Sensor was taken to or from the refrigerator/ freezer, the ST5 Sensor will spend some time calibrating the reading, and it would take about 20 minutes for the ST5 to measure to proper ambient temperature.
- The ST5 has a built-in USA-made DS18B20 chip, which is a strictly calibrated industrial-grade chip and is more accurate than ordinary consumer chips.
- Calibration is usually not required, if you need information about the chip, please check the FAQ.
- Calibration is only used to correct for small variations of ±0.9°F (±0.5°C). If you find larger differences than this during calibration, which indicates a problem with the calibration process of your Sensor, please contact MOCREO Customer Service

Configuration

【Name the Sensor】Tap Sensor Card > ⚙ Button on the Upper Right > Alias Name > Save
【Name the Hub】Tap ☰ Button on the Upper Left > Hubs > Click ⚙ Button on the Hub Card > Name > Save
【Alert】Tap ☰ Button on the Upper Left > Alert > Set Alert Model > Save
【Export Data】Tap Sensor Card > ⚙ Button on the Upper Right > Export Historical Data > Choose Time Period > Export

Troubleshooting

Sensor Failed to Add?

1. The App can't scan the Sensor in the setup process.
a) Please make sure your phone is within 15ft from Sensor
b) Please check whether ST5 Sesor has entered setup mode(poke Sensor for 1s, blue LED will flashing, which means the Sensor enters Setup mode)
c) Please do not turn off the Bluetooth and network on your phone (Android needs to open the GPS and authorize the positioning permission)

2. When adding a Sensor, the App scanned Sensor but did not add successfully
a) Click "Retry Button" on the page to re-add

b) If the Sensor still can't be added, please contact MOCREO Support for help

Note:

1. To improve wireless stability, it is recommended
(a) Install the Sensor as close to the Hub as possible..
It's better if the Hub and the Sensor are in sight.
(b) Reduce the obstacles between the Hub and the Sensor.
(c) The Hub and Sensor should be placed far away from water to avoid signal interference.
(d) Check if the Hub's antenna is tightened and keep it upright.
(e) Stay away from high power equipment, flammable and explosive materials.

2. Precautions about the Sensor placement environment
(a) The Data Logger is non-waterproof, please avoid water submerging and extreme temperature.
(b) The working temperature range of the Sensor is from -40°F to +257°F (-40°C to +125°C). When exceeding this range, the data monitored might be inaccurate or the Sensor might be damaged.

Warranty

MOCREO products enjoy a 12-Month limited warranty (start from the date when customer receives the product), which applies only to hardware components of the device that are not subject to accident, misuse, neglect, fire, or other external causes, alterations, repair.

Customer Service

https://mocreo.com/doc/manual/support/faq.html
+1 (530) 988-8608
contact@mocreo.com
YouTube MOCREO Sensor

FAQ

Search [MOCREO Sensor] on YouTube to watch the setup video tutorials

Disclaimer

The contents about how to use the product and the App guidance are only for reference, please refer to the actual situation for specific application. If there is something differs from the instruction during using the product, please contact MOCREO Support for updates. This product is for detecting and monitoring only, MOCREO is not responsible for any property damage or other consequences of the use of this product.

FCC Statement

FCC ID (Sensor) : 2A36D-ST4
FCC ID (Hub) : 2A36D-H1
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.
Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful

interference in a residential installation. This equipment generates uses and can radiate radio frequency energy, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

(v1.2)