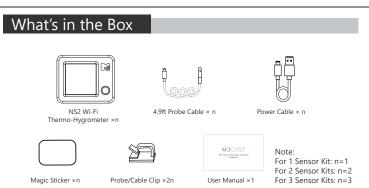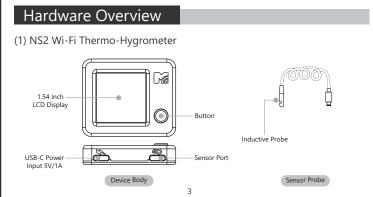# MOCREO®

Wi-Fi Thermo-Hygrometer User Manual
Model: NS2

Introduction

- **Clear Color Display:** NS2 Wi-Fi Thermo-Hygrometer features a color IPS LCD for instant, at-a-glance temperature readings. Use the device button to easily toggle through historical data and device information.
- **Dual Alert Notifications:** Receive immediate alerts via App push notifications and/or email whenever environmental conditions change, keeping you informed anytime, anywhere.
- **Operating Range:** -40°F-221°F(-40°C-105°C) & 0-80% RH (non-condensing)
- **Versatile Waterproof Probe:** Equipped with a 4.9-foot (1.5-meter), ultra-thin waterproof external probe. Ideal for monitoring conditions in refrigerators, freezers, bathtubs, warehouse, and various other environments.
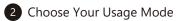
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What's in the Box

NS2 Wi-Fi Thermo-Hygrometer ×n
4.9ft Probe Cable × n
Power Cable × n
Magic Sticker ×n
Probe/Cable Clip ×2n
User Manual ×1

Note:
For 1 Sensor Kit: n=1
For 2 Sensor Kits: n=2
For 3 Sensor Kits: n=3

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Hardware Overview

(1) NS2 Wi-Fi Thermo-Hygrometer

1.54 inch LCD Display
Button
USB-C Power Input 5V/1A
Sensor Port
Inductive Probe
Device Body
Sensor Probe

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Specifications

Parameter	Specification
Button	1 physical button
Display	1.54-inch IPS LCD
Display Resolution	240 × 240 pixels (non-touch)
Wi-Fi Connectivity	2.4 GHz band (802.11 b/g/n) 5 GHz not supported
Bluetooth	Bluetooth Low Energy (BLE) 5.0
Dimensions (L × W × H)	2.07 × 1.72 × 0.46 inches
Weight (with probe)	3.6 oz (103 g)
Probe Temperature Range	-40°F to 221°F (-40°C to 105°C)
Temperature Accuracy	±0.9°F (±0.5°C) within 14°F to 185°F (-10°C to 85°C)
Operating Humidity	0% to 80% RH (non-condensing)
Humidity Accuracy	±3% RH (typical @ 25°C)
Power Requirements	5V/1A USB power adapter (not included)

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(2) NS1 Button Instructions

Button Action	Result
Short Press	Cycle to next display page
Press & Hold for 5 seconds	Enter Setup Mode
Press & Hold for 5 seconds (while in Setup Mode)	Exit Setup Mode
Press & Hold for 15+ seconds	Restore Factory Default Settings

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Setup

1 Power On Your Device

- Connect the NS2 to a 5V/1A (or higher) USB power adapter.
Note: The power adapter is not included.

2 Choose Your Usage Mode

Use Without Network (Offline Mode)
- If you prefer not to connect to the internet, simply press and hold the device button for 5 seconds to enter or exit Setup Mode as needed.
Note: The NS2 Sensor cannot be monitored remotely or use online alert features when operating in offline mode.

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Use With Network (Recommended)
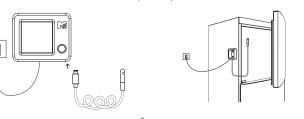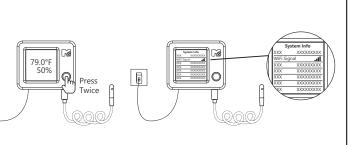- Download the MOCREO Smart app via Google Play, Apple App Store, or by scanning the QR code below.

- Open the app and register an account if you haven't already. Registration is required to access all features.
- Follow the in-app instructions to add your NS2 device and complete the setup.
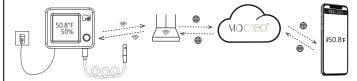
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Installation

Position the NS2 in close proximity to your Wi-Fi router and at an elevated location within the same space, avoiding major physical barriers and electronic interference sources for optimal performance.

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Test the Effective Distance

79.0°F 50%
Press Twice
System Info

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How the System Works

50.8°F 50%

The NS2 operates as a standalone Wi-Fi sensor (2.4GHz) that connects directly to your router. Its signal strength varies with environmental obstacles and distance, while cloud-enabled connectivity allows global data access via the MOCREO Smart App after initial setup.

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Calibration

Factory Calibration
The NS2 undergoes precision instrument calibration during manufacturing, ensuring measurement accuracy within certified tolerances (±0.9°F). Recalibration is typically unnecessary throughout the product lifecycle.

Thermal Stabilization
When transitioning between environments with >18°F (10°C) temperature differentials (e.g., freezer to room):
- Allow 15-20 minutes for thermal equilibrium
- Displayed readings will gradually converge to ambient temperature
- This hysteresis is inherent to all thermal sensors

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Calibration

Manual Adjustment
To compensate for installation-specific variations:
1.Navigate: **App > Sensor List > NS2 > ⊕ Settings > Calibration**
2.Apply offset values (±9°F max adjustment for temperature; ±5% RH max adjustment for humidity)
3.Changes take effect in real-time

Best Practice: Verify calibration against NIST-traceable thermometer and hygrometer in stable environments.
Note: MOCREO does not issue temperature or humidity calibration certificates at purchase.

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Precautions

To ensure the normal use of the product, please pay attention to the following situations:
- It is recommended to install the NS2 in a high place.
- Do not expose the device to high temperatures, humidity, or dusty environments.
- Do not place the device near flammable materials.
- Do not put heavy objects on the device or use it as a support.
- Children should not use the device without adult supervision.

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FCC Statement

FCC ID : 2BFZL-H3
This device complies with part 15 of the FCC rules.Operation is subject to the following two conditions:
- This device may not cause harmful interference
- 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, according 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

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FCC Statement

and can radiate radio frequency energy and, 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:
- Increase the separation between the equipment and the receiver.
- Consult the dealer or an experienced radio/TV technician for help.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

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Warranty

MOCREO products enjoy a 12-month limited warranty (starting from the date when the 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, or repair.

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 applications. If there is something different from the instructions 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.

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Customer Service

- https://doc.mocreo.com/
- help@mocreo.com
- ▶ YouTube MOCREO

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

User Guide Manual

(v1.0)