# Temperature and Humidity Sensor / Controller

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#### Introduction

Congratulations on purchasing the Temp/Hum Controller, a state-of-the-art IoT temperature and humidity sensor designed for optimal growing conditions in your smart garden or greenhouse. This user manual will guide you through the installation, operation, and maintenance of your device.

#### Temperature and Humidity Sensor / Controller

#### Safety Precautions

- \* Ensure that the device is installed and operated in a well-ventilated area to prevent moisture buildup.
- \* Keep the device away from children and pets to avoid any accidents or damage.
- \* Avoid exposing the device to extreme temperatures (below -20°C or above 40°C) for an extended period.

## **Product Description**

The Temp/Hum Controller is a compact, WiFi-enabled IoT sensor that measures temperature and humidity levels in real-time. It features:

- \* Precision temperature and humidity sensors
- \* ESP8266 microcontroller for easy integration with your smart home system
- \* Real-time monitoring via MQTT protocol
- \* Compatibility with various smart devices and platforms

#### **Installation and Setup**

- 1. Unbox the device and remove all packaging materials.
- 2. Locate a power source (USB or DC adapter) to charge the device.
- 3. Connect the device to your WiFi network using the provided instructions.
- 4. Once connected the device enables users to configure various settings through a customizable webpage. This interface allows individuals to personalize their experience by adjusting parameters such as MQTT server settings.
- 5. Configure the sensor settings according to your specific needs.

#### **Operation Instructions**

- 1. Place the device in the desired location within your growing space (e.g., greenhouse, smart garden).
- 2. Ensure the device is level and stable to prevent errors.
- 3. The Temp/Hum Controller will automatically connect to your WiFi network and begin transmitting data to the IoTGrowSolutions server.
- 4. Use the app to monitor temperature and humidity levels in real-time.

#### **Features and Functions**

- \* Real-time monitoring of temperature and humidity levels
- \* Smart alerts for critical climate conditions (e.g., extreme temperatures, high humidity)
- \* MQTT protocol compatibility for seamless integration with other devices and platforms
- \* WiFi connectivity for easy setup and configuration

# **Troubleshooting**

- \* Device not connecting to WiFi: Check your network connection or restart the device.
- \* Incorrect temperature readings: Ensure proper sensor placement and calibration.
- \* App issues: Restart the app or contact our support team.

## **Maintenance and Cleaning**

- 1. Regularly clean the sensors with a soft cloth to prevent dust buildup.
- 2. Update firmware regularly to ensure optimal performance.
- 3. Perform routine maintenance (e.g., battery replacement) as recommended by our support team.

#### **Warranty and Support**

The Temp/Hum Controller comes with a 1-year limited warranty. For any technical support or warranty-related inquiries, please contact us at [info@iotgrowsolutions.com](mailto:info@iotgrowsolutions.com).

# **Appendix**

- \* Quick Start Guide
- \* Sensor Calibration Instructions
- \* Technical Specifications