

Teros 12 Soil Moisture Sensor Controller

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Introduction

Congratulations on purchasing the Teros 12 Soil Moisture Sensor Controller from IoT Grow Solutions! This user manual will guide you through the features, functions, and operation of your new controller.

The Teros 12 is an advanced soil moisture sensor controller designed for precision agriculture and smart irrigation systems. It measures VWC (Volumetric Water Content), temperature, and EC (Electrical Conductivity) to provide precise soil monitoring and control.

Hardware Overview

The Teros 12 Soil Moisture Sensor Controller consists of:

- * Main Unit: The brain of the system, housing the microcontroller and communication interface.
- * Sensor Module: Attaches to your soil moisture sensor probe, measuring VWC, temperature, and EC.
- * Power Supply: DC power adapter (included).

Software Overview

The Teros 12 comes with:

- * Firmware: Pre-loaded on the main unit, ensuring compatibility with SDI-12 communication.
- * Webpage with MQTT configuration info for sending data to MQTT broker

Installation and Setup

1. Mount the sensor module to your soil moisture probe according to manufacturer's instructions.
2. Connect the power supply to the main unit.
3. Insert an SD card (optional) to store firmware updates and data.
4. Configure the software suite using the provided user manual and online resources.

Features and Functions

- * Measure VWC, temperature, and EC in real-time.
- * Connect to our IoT ecosystem for remote monitoring and control.

Operating Instructions

1. Boot up the system
2. Connect to device and configure wifi settings and Mqtt settings: Access the software suite via the browser on <http://192.168.4.1>
3. Auto Take readings: The device uses the SDI-12 communication to connect to your sensor to transmit data.
4. Monitor soil conditions: View real-time data on the software suite or cloud platform.

Maintenance and Troubleshooting

- * Regularly check sensor connections for proper alignment and cleanliness.
- * Update firmware as recommended to ensure compatibility with new sensors or features.
- * Consult our online resources or contact IoT Grow Solutions support if you encounter any issues.

Safety Precautions

- * Use caution when handling electrical components.
- * Avoid exposure to extreme temperatures, moisture, or physical stress.
- * Follow all manufacturer guidelines for sensor installation and operation.

By following this user manual, you'll be able to optimize your soil monitoring and control with the Teros 12 Soil Moisture Sensor Controller. Happy growing!