UgMO UG400S User Manual

Introduction

UgMO™ monitors soil moisture in the root zones of your plants. UgMO saves water and improves plant health by limiting overwatering for lawns and ornamental plantings. The UG400S paired with UG1000 controllers or PH100-B devices will enable water savings using smart irrigation algorithms.

UgMO wireless sensors have a patented electronic moisture and optional salinity sensing circuit and low power radio signal.

Two uniquely configured batteries (supplied and installed) provide an operating life of up to 5 years.

UgMO devices are weather resistant for outdoor use. Wireless Sensors are buried at depths from 1" to 4" according to plant and soil types and operate at distances up to 600 feet, depending on soil type, depth, and line of site to the Base Station. UgMO sensors are easy to install, effective and long lasting. It is not uncommon for a typical home to reduce water use by as much as 45%.

UgMO UG400S sensor is a new generation of wireless sensors that is designed to be compatible with the existing ProHome and UG1000 product line.

The UG400S is a direct replacement for PH100-WS sensors.

The device is intended for installation underground. It has a on/off switch that is activated by means of turning the battery door one quarter turn. The device will not sense anything for the first minute after power up, allowing the device to be inserted in position underground.

Compatibility

UG400S is compatible with PH100-R, PH100-B and UG1000 devices.

Installing the Sensor

Place the sensors on top of the ground in the corresponding zones that they represent for the associated above ground UgMO device (Refer to manuals for UgMO PhoMO and UG1000 devices for more detail). The ideal location in each zone is between sprinkler heads, in the driest part of the zone and with the clearest line of sight to the above ground device when at all possible. The sensors should be placed perpendicular to the above ground device, so that the broad side of the sensor body

is facing in the direction of the device.

Once all sensors are placed on top of the ground in the correct zones, go back to the above ground device and restart it (if a PH100-B device) or start the sensor pairing activity.

3. Go back to the zone one sensor. Dig a hole using a small shovel or a hole-cutter approximately one and quarter times the length of the sensor and three times the width (keeping in mind the orientation. Burry the sensor and ensure it is heard at the intended Base Station or Controller.

Placement of The Sensor

1. Using a 1.5" putty knife or something similar, create a horizontal slit in the soil, so the center of the slit is 1.5" to 1.75" below the top of the soil and within the root zone of the plant.

2. Take some dirt from the hole and perform a field test to identify the soil's physical properties which will be used later for setting the zone Wetness Settings (field test instruction can be found in the manual in Appendix B).

3. Turn the sensor on using the turn switch at the back side of the sensor. Ensure steps 4 – 6 are completed within 1 minute of powering on of the sensor. Make sure the whisker is attached to the sensor body prior to powering on of the sensor.

4. Insert the sensor blade into the slit you created without wiggling or applying any side-to-side pressure on the sensor blade.

5. Place the whisker, loop side down so that the top is out of the ground at a level that is close to the length of the grass or where it can be covered by a thin layer of mulch, (If sensor is located in a planting bed).

6. Bury the sensor and whisker, making sure to pack the soil firmly as you fill the hole and place the turf cap back on.

Operations

Once the sensor is installed it will require no intervention from user, with the exception of change of battery. The device reports its battery level.

Notices

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, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for 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 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.

- 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

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

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Les changements ou modifications non approuvés expressément par la partie responsable de la conformité pourrait annuler l'autorité de l'utilisateur à faire fonctionner l'équipement.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.