



# GrowSphere™ ONE

Field Monitoring Unit

Quick Setup Guide

2025



Precision  
Agriculture

 **NETAFIM™** DIGITAL FARMING

## Overview

- A stand-alone monitoring unit, based on cellular communication
  - \* It is essential to verify 3G/4G cellular coverage prior to installation
  - \* Global SIM card – included
- The ONE can be connected to a wide range of sensors to collect real-time data from the field and optimize irrigation management

## Specifications:

### → Type of Inputs

- 3X Analog Input
- 1X Serial Input
- 2X Digital Input

### → Environmental Specifications

- Operating temperature:  
-10°C to 55°C (14°F to 131°F)
- Storage temperature:  
-20°C to 60°C (-4°F to 140°F)
- Air humidity: 0 to 95%

### → Hardware

- Outdoor Installation: IP65 ,  
UV protection
- Standard Compliance:  
CE & FCC.
- Power Source:
  - Optional solar panel 5.5 watt  
(external solar panel is  
provided with a 5m  
extension cable)
  - Battery rechargeable li-ion  
pack 3.7V 5200mAh
  - Optional operation via  
external source  
(charging cable is included)

→ 3 different solar panel configurations:

1



**GrowSphere™ ONE**  
integrated solar panel

2



**GrowSphere™ ONE**  
external solar panel

3



**GrowSphere™ ONE**  
Without a solar panel (relevant for specific places)

## What is in the BOX

**GrowSphere™ ONE**  
Integrated solar panel



ONE monitoring unit



Integrated solar panel 5.5W

**GrowSphere™ ONE**  
External solar panel



ONE monitoring unit +  
bracket



External solar panel 5.5W +  
5m extension cable

**GrowSphere™ ONE**  
Without a solar panel



ONE monitoring unit

Accessories Kit:



Antenna



Charging cable



Base plate



Bird spikes



Metal cable ties



Plastic bands



Magnetic  
screwdriver  
2x50mm



Activation  
magnet

## Sensor portfolio

### Digital Inputs



Water Meter



Pressure Switch



Rain Collector

### Serial Input



NetaCap



WET150

### Analog Inputs



Temp & Humid



Pressure



SM150T



Tensiometer

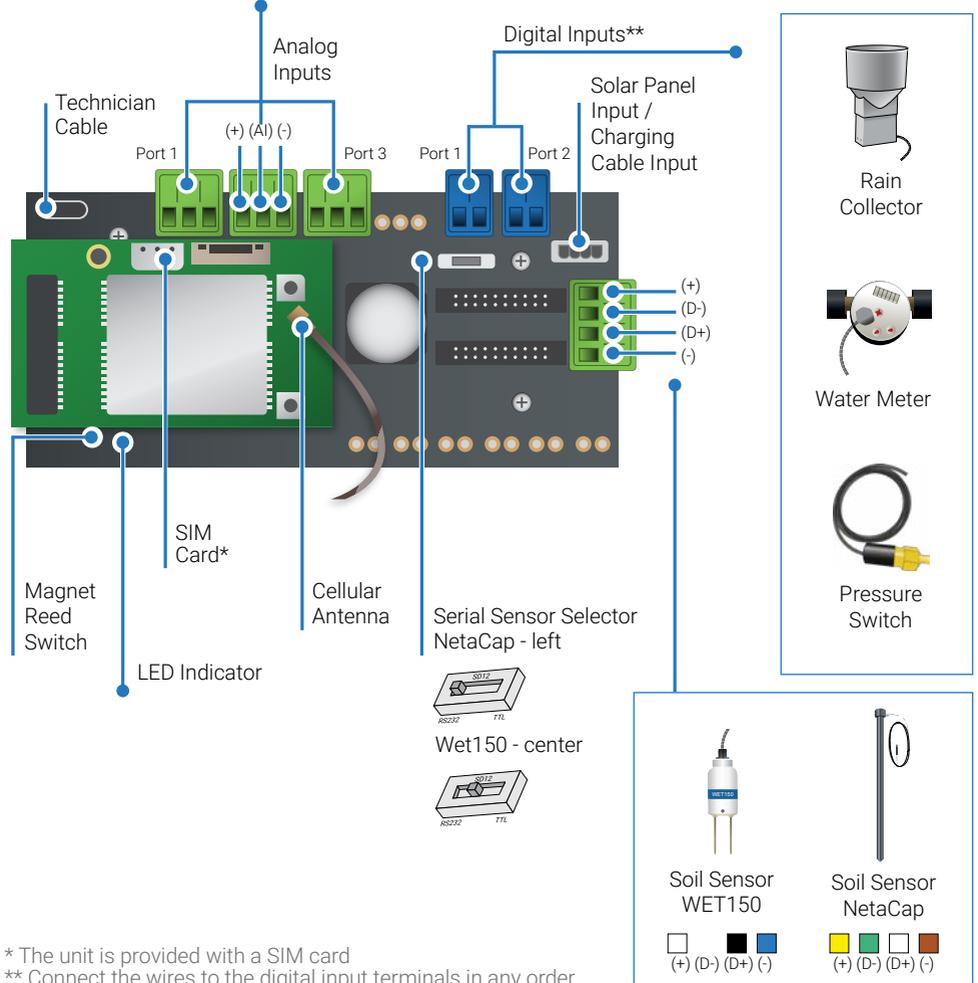
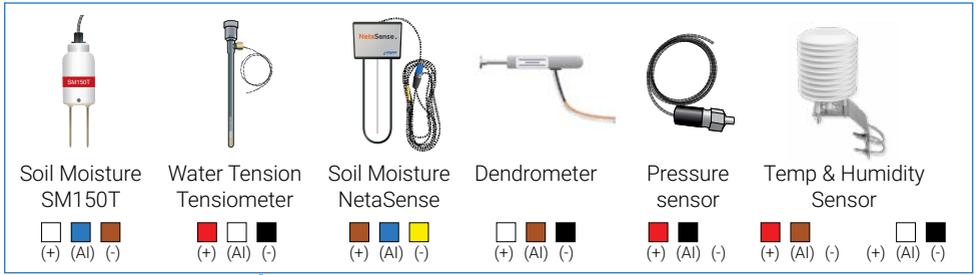


Dendrometer



NetaSense

# Sensor Wiring Diagram

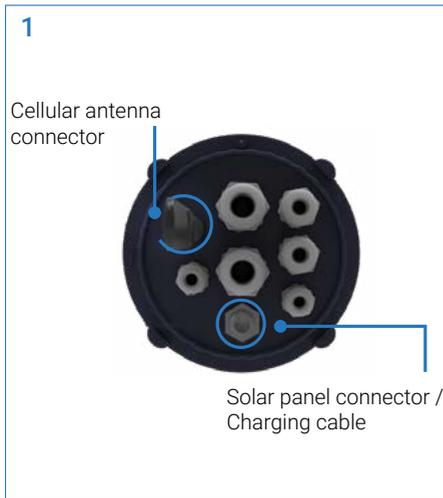


\* The unit is provided with a SIM card

\*\* Connect the wires to the digital input terminals in any order

## Installation Preparation

1. Connect the antenna to the device



2. Connect the charging cable to the device



3. Charge the device for at least 5 hours (A blue LED will indicate battery charging)

4. After charging the device, disconnect the cable

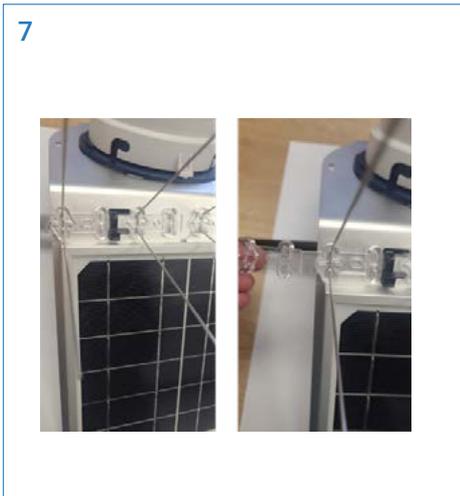
5. For the “integrated solar panel” device, assemble the device to the solar panel



6. Connect the solar-panel cable



7. Connect the bird spikes to the solar panel if required



## ONE Installation

- Place the unit at least 1m above the ground, to avoid dirt inside the unit
- To improve cellular reception it is recommended to place the device above the crop
- To improve sun absorption it is recommended to install the solar panel above canopy

Integrated solar panel



Northern Hemisphere – panel facing south  
Southern Hemisphere – panel facing north

External solar panel, 5m cable



## Mobile Application

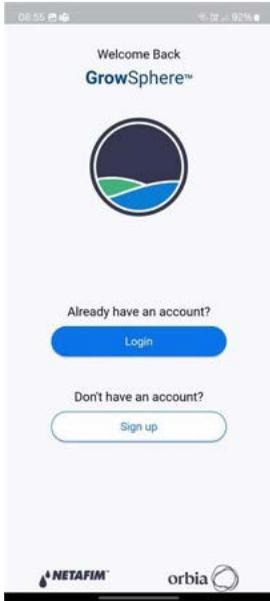
Download the **GrowSphere™** mobile application:



or simply Scan the QR code:



Open the **GrowSphere™** app



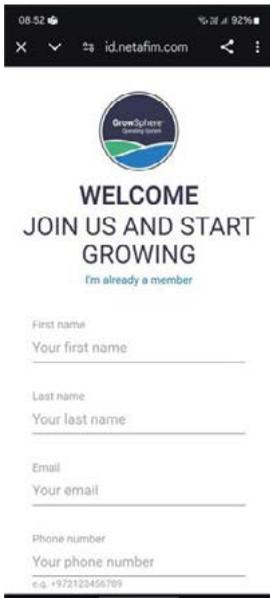
**Existing user?**

Click 'Login'

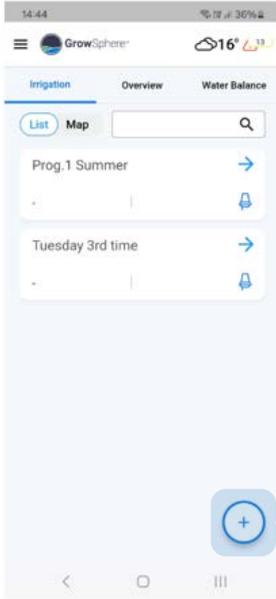


**New user?**

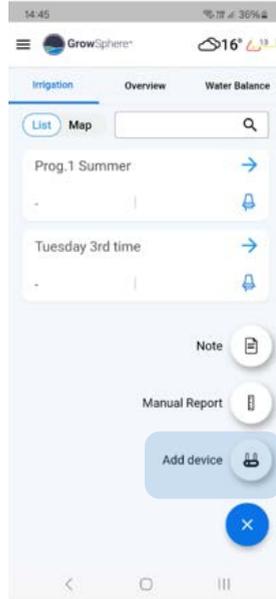
Click 'Sign up' and fill in your details



# Add device



Click the + button

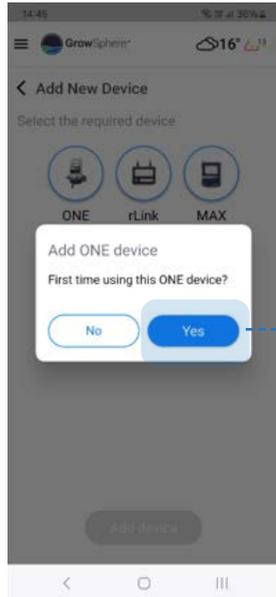


Add device

For first users –  
Your journey starts here:



Choose the ONE

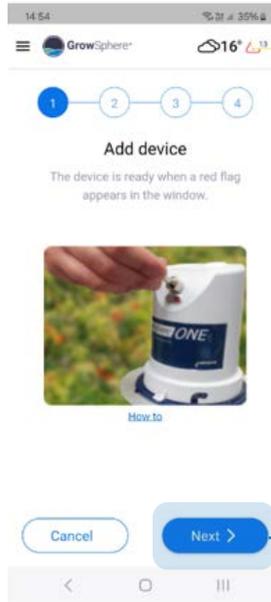


For new device click Yes

# Follow the instructions

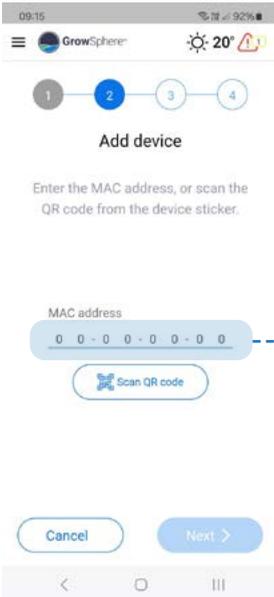


Click OK



Attach the magnet to the designated spot

Click next



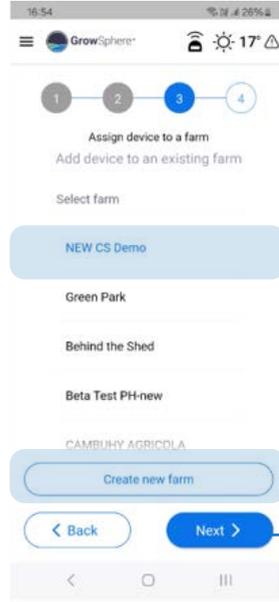
Device sticker:



## Assign to a farm



Click next



Choose an existing farm

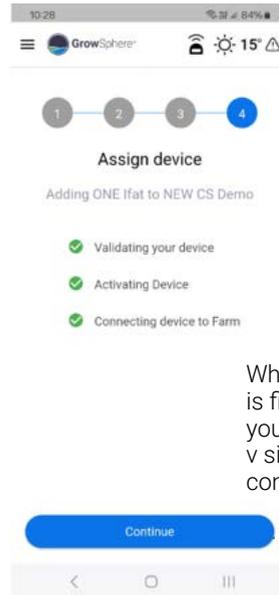
Create new farm

Click next



Name your device

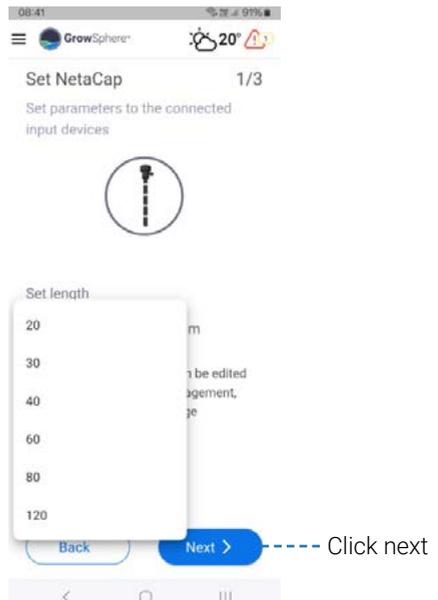
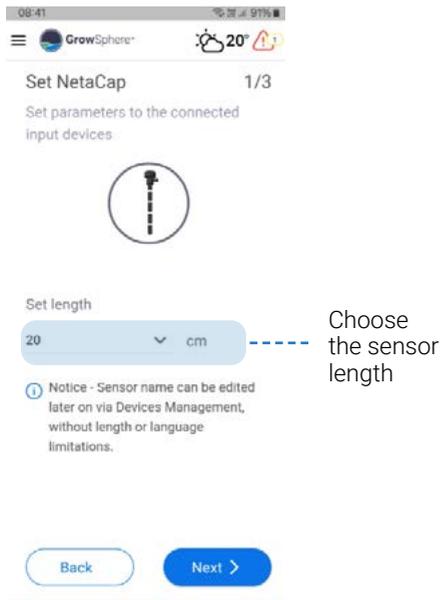
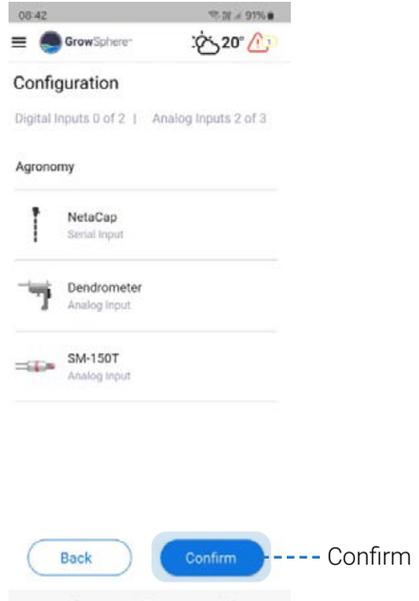
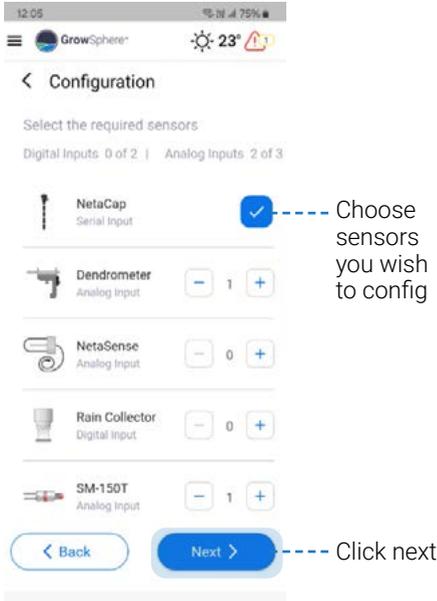
Click assign



When the process is finished and you have 3 green v signs, click continue

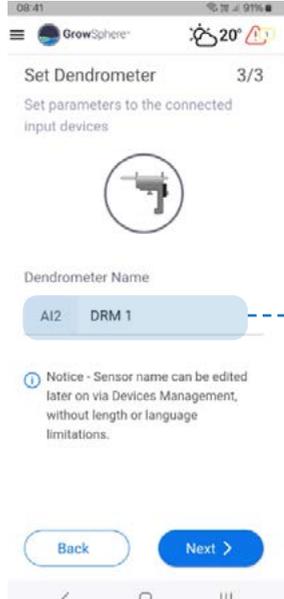
# Sensor configuration

For example:

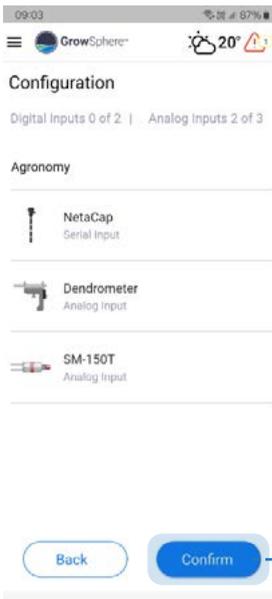




Name your sensor



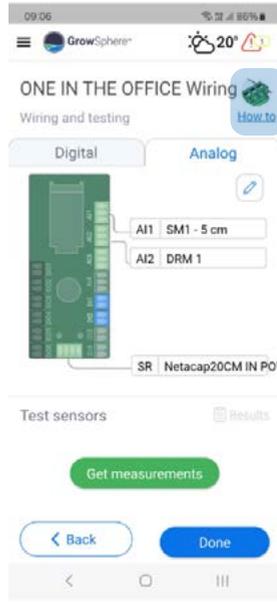
Name your sensor



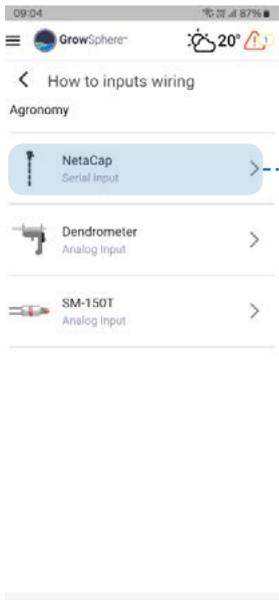
Confirm



# Sensor wiring

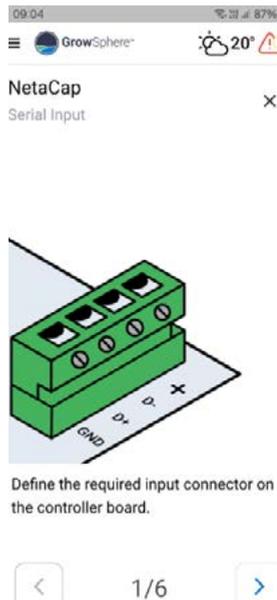


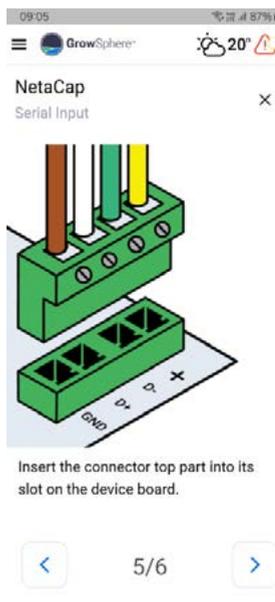
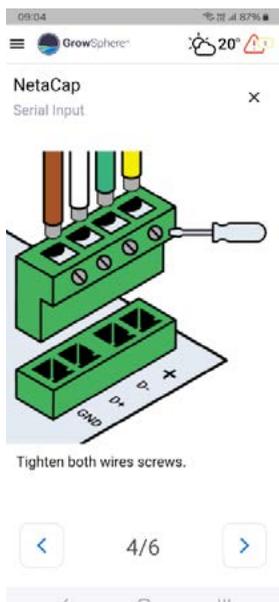
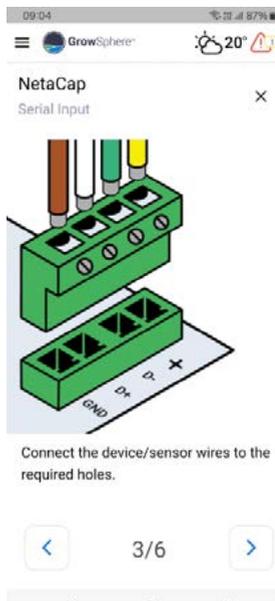
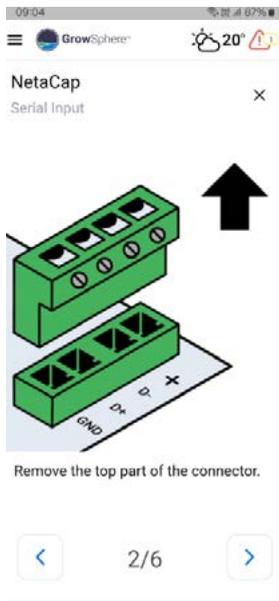
Click 'How to' to get the proper wiring instructions



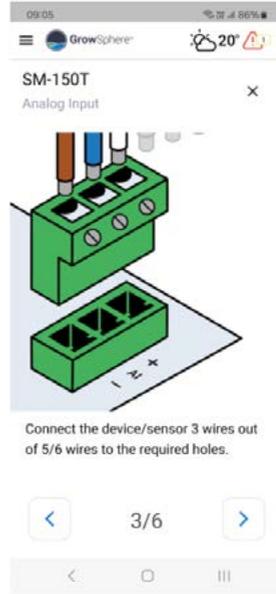
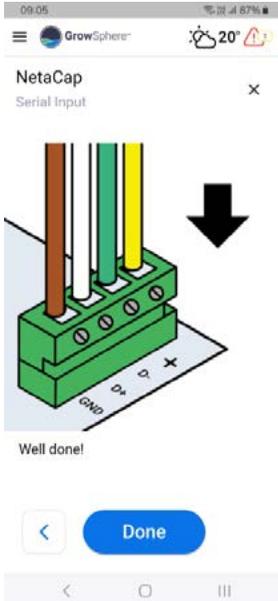
Choose the sensor you wish to wire

1<sup>st</sup> sensor:

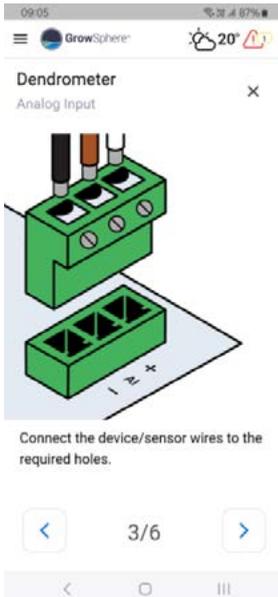




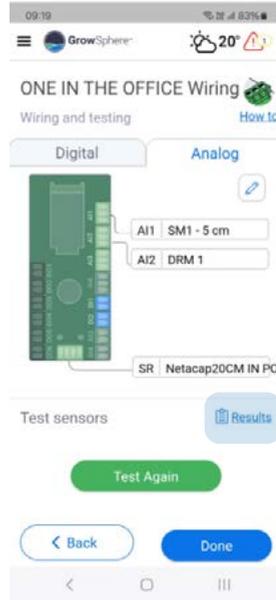
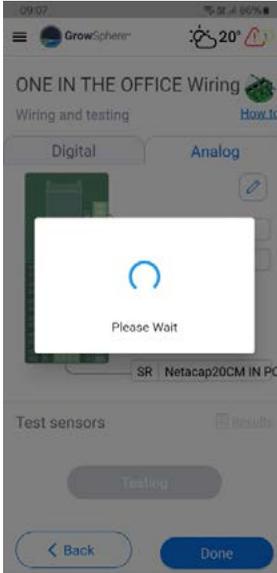
## 2<sup>nd</sup> sensor (example):



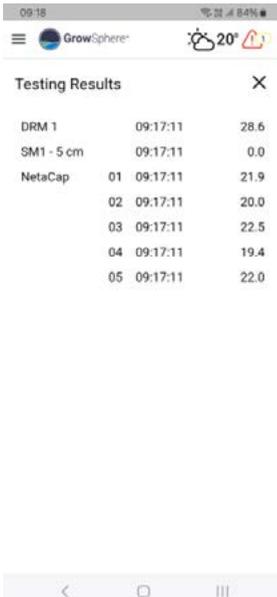
## 3<sup>rd</sup> sensor (example):



To validate correct wiring and sensor functionality, click on 'Get measurements'



Click 'Results' to get the sensor's readings



For **GrowSphere™** Support Center Scan:





[www.netafim.com](http://www.netafim.com)