Wireless monitoring for a greenhouse



Reliable wireless technology and simple set-up Accurate measurements anywhere in the greenhouse Secure local data storage and no internet required o g CO_2 EC VW(

Why monitor temperature and relative humidity?

- Temperature is one of the driving factors in crop development. Monitoring temperature can provide real-time data that can be used to optimize growing conditions and reduce costs on heating.
- The relative humidity in the air can affect the flow of water through the plant the higher the relative humidity, the slower the transpiration occurs.
- If environmental changes that affect the transpiration rate are rapid enough, plant tissue can be damaged.

Aranet PRO base station

Systems consist of a base station with advanced data analysis software and wireless sensors that measure temperature and relative humidity.

- 3 km/1.9 mi line of sight range between the base station and sensors.
- Up to 100 sensors per base station.
- 24/7 monitoring with e-mail and SMS alerts.
- Safe, private network independent from 3rd party service providers.

Aranet T/RH sensors

- Measures temperature and relative humidity.
- Measurement range –T (-40°C to 60°C / -40°F to 140 °F). RH (0% to 100%).
- Battery life up to 10 years.
- IP42 or IP67 indoor/outdoor use.
- Data transmission can be set to 1, 2, 5 or 10 minutes.

Aranet T/RH sensor with Radiation Shield

- Protects temperature measurements from sun radiation.
- Battery life up to 10 years.
- IP65 designed for greenhouses.
- Data transmission can be set to 1, 2, 5 or 10 minutes.

Aranet T-probe sensor

- Monitors air, liquid and solid surface temperature.
- Probe lengths 0.3 m / 1 m / 5 m / 10 m; 0.9 ft / 3.2 ft / 16.4 ft / 32.8 ft.
- Measurement range T (-55°C to 105°C / -67°F to +257°F).
- Battery life up to 10 years.
- IP68 class hermetic enclosure.
- Data transmission can be set to 1, 2, 5 or 10 minutes.

Aranet IR plant temperature sensor

- Plant temperature is a critical parameter for determining Vapour Pressure Deficit (VPD).
- IP65 casing.
- Up to 12 years of battery life.

CO₂ and Temperature sensor

- Aranet carbon dioxide, temperature and atmospheric pressure sensor is wireless and battery-powered.
- It is highly accurate, versatile, simple to set up and is an integral part of many industrial processes in greenhouses, storage tanks and others.
- IP67 protection class.

Aranet PAR sensor

- Light is an essential element of photosynthesis and overall plant development as it impacts numerous factors including plant form and structure, plant orientation, and reproduction.
- PAR meter is a sensor for measuring photosynthetic active radiation. It helps to determine the amount of light the plants are exposed to.
- IP68 protection class.

Aranet Stem Micro-Variation sensor

- Changes in stem diameter is a response to plant water status and soil water content.
- Sensors on selected plants continuously monitor micro-variations of stem diameter to help optimize irrigation.
- IP64 protection class.

Aranet Soil VWC, EC and T sensor

- The built-in soil moisture sensor helps determine when plants need or do not need watering by regularly indicating the water content of the soil.
- The sensor is equipped with a built-in temperature sensor to determine if the soil temperature is ready for planting and seeds can germinate properly.
- The sensor also has and electrical conductivity meter a reliable and easy way to determine if fertilizer nutrient levels are adequate for optimal plant growth.
- IP68 protection class.

Aranet Soil Moisture sensor

- Cost-effective wireless soil moisture sensor designed for wide range applications for efficient monitoring of irrigation delivery to plants.
- IP67 protection class.

Aranet Weight sensor

- Plant weight is essential to quantify plant growth and increase in biomass.
- The weight sensor allows close monitoring of plant growth and development, therefore allowing for more precise optimization of plant environmental conditions.
- IP67 protection class.

To find out more visit Aranet.com

The specifications or information contained in this document are subject to change without notice due to continuing introduction of design improvements. If there is any conflict between this document and compliance statements, the latter will supersede this document.













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