# WIRELESS MONITORING FOR A GREENHOUSE



reliable wireless technology, simple set-up, it just works!

accurate measurements anywhere in the greenhouse

secure local data storage and no internet required

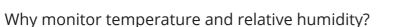
o g

●**∬**℃



- SENSOR DATA
- O LAN
- O 12V
- O POWER FROM BATTERY

⊖-œ-⊕ lan reset •€



- 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

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 base station and sensors.
- Up to 100 sensors per base station.
- Complimentary software for data analysis.
- 24/7 monitoring with e-mail and SMS alerts.
- Safe, private network independent from 3rd party service providers.

#### Aranet T/RH sensor

- Measure 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 IP68 indoor/outdoor use.
- Data transmission can be set to 1, 2, 5 or 10 minutes.

#### Aranet T/RH sensor with Convection Shield

- Protects temperature measurements from sun radiation.
- Battery life up to 10 years .
- IP68 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.
- IP class 68 hermetic enclosure.
- Data transmission can be set to 1, 2, 5 or 10 minutes.

#### Aranet CO<sub>2</sub> sensor

- CO<sub>2</sub> is one of the key ingredients of photosynthesis, it is essential for plants to grow.
- Monitoring CO<sub>2</sub> in greenhouses allows optimisation of growing conditions, resulting in more efficient plant growth and higher crop yield.
- If the level of CO<sub>2</sub> in the greenhouse is too high it can be damaging to plants.

#### Aranet Soil sensor

- The built-in soil moisture sensor helps determine when plants need or 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 will also have electrical conductivity meter a reliable and easy way to determine if fertilizer nutrient levels are adequate for optimal plant growth.

#### Aranet PAR meter

- 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 determine the amount of light the plants are exposed to.

#### 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.

#### Aranet Stem micro-variations 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.

### To find out more visit www.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.















## www.aranet.com

For more detailed information about Aranet products visit www.aranet.com, contact your Aranet representative or write to info@aranet.com. Product specifications are subject to change without prior notice. Copyright © 2020 SAF Tehnika, JSC. All rights reserved.