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Priva | Aranet Wireless sensors

Product Overview



Discover all

Wireless sensors

Wireless sensors give you the flexibility to place them in any location in your crop production facility. Whether to measure the microclimate around the top of your plants or around the fruits in the lower part, you are free to decide which additional data you want to obtain to gain more insight into the crop environment. Extra sensors enable you to identify anomalies quickly and tackle the cause, without having to check everything manually.

Priva | Aranet wireless sensors can be fully integrated with the control software of Priva Connext and Compact CC climate computers or used for monitoring purposes only.



The base station is essential to collect the wireless sensor data. It allows easy data export for further analysis. The wireless sensors can be deployed outdoors within the range of up to 3 km, in a greenhouse within the range of 100 to 150 meters.

- Easy to add (pair) new sensors
- · Min and Max notification thresholds for individual sensors and groups of sensors
- · Choose sensor measurement interval (1, 2, 5 or 10 minutes)
- · 100 sensors per base station, Priva Cloud solution unlimited

Priva | Aranet T/RH sensor with **Radiation Shield**

The Convection Radiation Shield in combination with temperature & relative humidity sensor is a unique solution, provides precise air temperature measurements for greenhouse environment.

- · Measures temperature & relative humidity
- Protects measurements from sun radiation
- IP Class 65
- · Up to 10 years battery life

Priva | Aranet T/RH IP67 sensor

The T/RH sensor measures temperature and relative humidity. The IP class 67 hermetic enclosure of the sensor ensures that no excessive moisture or dust particles can alter the readings, ensuring constant and reliable data monitoring.

- · Measures temperature & relative humidity
- IP Class 67
- · Up to 10 years battery life

Priva | Aranet CO, and Temperature sensor

The carbon dioxide sensors have IP67 protection class. They can be placed in harsh environmental conditions. Sensors perform highly accurate measurements as well as they are flexible and easy to setup.

- CO₂, temperature and atmospheric pressure monitoring
- IP Class 67
- Up to 8 years battery life

Priva | Aranet PAR sensor

The PAR sensor allows measuring of Photosynthetically active radiation and Photosynthetic Photon Flux Density (PPFD). It helps determine the amount of light the plants are exposed to.

- PPFD Monitoring
- IP Class 68
- Up to 7 years battery life

sensors Crop



Priva | Aranet Infrared Object temperature sensor

The object temperature sensor measures the temperature of a leaf or part of the crop. The temperature measurement in combination with other climate parameters provides insights in the status of the crop.

- Measures plant temperature
- IP Class 65
- Up to 12 years battery life



Priva | Aranet Stem Variation sensor

The stem micro variation and 4-20mA sensor combination offers full wireless solution for stem variation monitoring in greenhouses. The sensor allows investigating effects of irrigation rate and other environmental factors on water balance and growth of plants.

- · Measures stem diameter
- IP Class 64
- Up to 7 years battery life



Priva | Aranet Weight sensor

The weight sensor allows close monitoring of plant growth and development, therefore allowing for more precise optimization of plant environmental conditions.

- Measures weight
- IP Class 67
- Up to 5 years battery life



Priva | Aranet Soil VWC, EC and T sensor

The Soil Moisture Sensor (VWC, EC and T sensor) helps to determine the optimal watering for the plants by regularly indicating the water content of the substrate.

- Measures soil and substrate moisture
- · Built-in soil and substrate temperature & EC meter
- Up to 7 year battery life
- IP Class 68



The Soil Moisture sensor helps to determine the optimal watering for the plants by regularly indicating the water content of the soil for optimal plant growth.

- Measures soil and substrate moisture
- IP Class 67
- Up to 10 years battery life





Priva | Aranet contact temperature sensors

The contact temperature sensor measures the temperature of liquids or solid objects. Available in multiple cable lengths.

- · Measures contact temperature
- IP Class 68
- · Up to 10 years battery life



Priva | Aranet Ultrasonic Distance sensor

The Ultrasonic Distance sensor uses ultrasound to measure the distance to an object. A high frequency sound wave is emitted by the device, measuring the time it takes for the wave to reach the object and then return to the sensor.

- Measures distance
- IP Class 67
- Up to 5 years battery life



Priva | Aranet universal sensors

The universal sensors can be used to make any sensor with a -32 + 32VDC, 4 to 20 mA, or puls output wireless.

- · Measures a generic sensor signal
- IP Class 68
- · Up to 5 years battery life



Priva | Aranet Ping-Pong Kit

Wireless, battery-powered tools designed to be used as signal testers. When choosing a location for potential sensor placement, simply check if the signal strength is good enough with just one push of a button on the sensor. The sensors will immediately indicate the strength of the received Aranet radio packet with the green LEDs.

- · Indicates teh network coverage
- IP Class 42
- Up to 12 year battery life

An integrated solution:

Wireless sensors help to optimize your greenhouse operations. They can easily be moved inside a compartment to offer extra insights in climate differences and identify anomalies. The integration of wireless sensors in the Connext and Compact CC control loop makes it easy and cost-effective to use multiple measurements in a single strategy. This enables you to steer based on minimum, maximum or average measurements.

If you choose to use the wireless sensors for monitoring purposes only, you can still make the measurements available in Priva Operator and have all your data available in one overview.

