

Vapor Pressure Deficit

Finding the “Sweet Spot”

Vapor pressure deficit (VPD) is a measure used to evaluate the drying power of the air on plants, indicating how much moisture is being removed from the plant by the atmosphere. When VPD levels are high, meaning the air is relatively dry, the plant experiences increased transpiration pressure and consumes more water. Inadequate watering under these conditions can lead to wilting. Conversely, if VPD levels are low, the plant will transpire less, making it important not to overwater the plant in such conditions.

VPD is calculated using temperature and relative humidity measurements. VPD measures the difference between the moisture in the air and how much moisture the air can hold at a given temperature. Aranet provides a set of various sensors that measure temperature and relative humidity. Choose the one most suitable for you and perfect your growing experience!



Aranet IR Plant Temperature Sensor

Measure leaf surface temperature, a critical parameter to calculate true Vapor Pressure Deficit.



Aranet PAR Sensor

Measure photosynthetically active radiation to determine the amount of light plants are exposed to. Optimize usage of artificial lighting, leveraging natural light



Aranet T/RH IP67 Sensor

Temperature and relative humidity sensor that can be placed in harsh environmental conditions



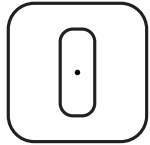
Aranet T/RH Sensor with Radiation Shield

Innovative solution for accurate temperature and humidity measurements in greenhouses exposed to direct sunlight.

Measure. Know. Act.

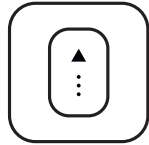


Aranet offers a monitoring solution that tracks temperature (T), relative humidity (RH), VPD, dew point, volumetric water content (VWC), electrical conductivity (EC), CO₂, light duration and intensity, DLI, weight, and more for data-driven plant growth.



Wireless Sensors

Send data to the base station up to 3 miles line-of-sight.



Base Station

Collects and stores data from up to 100 sensors.



Aranet Cloud

Monitor and analyze processes from anywhere, anytime.



Data-Driven Decisions

Adjust environmental parameters or automate processes through integration.



Aranet can be easily integrated with Argus Controls, Damatex, Growlink, Grownetics, Hoogendoorn, Neatleaf, PRIVA, Ridder, Stratus Designs, TC Controls, TRYM, TSR Grow, Wadsworth Controls, and more.



FOR MORE DETAILED INFORMATION ABOUT ARANET PRODUCTS, PLEASE VISIT ARANET.COM,
CONTACT YOUR ARANET REPRESENTATIVE OR WRITE TO INFO@ARANET.COM.
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