



CREATING  
A CLIMATE  
FOR GROWTH

**PRIVA**

## > PRIVA SENSORS

Optimizing your response to the elements

**For optimal crop development, the temperature, light, humidity and CO<sub>2</sub> concentration in the greenhouse must be in perfect balance. This requires precise measurement and control. Priva supplies a wide range of sensors. The Priva process computers utilize the values from the sensors to intelligently control the CO<sub>2</sub> dosing, ventilation, shading or heating, for example.**

### **Priva CO<sub>2</sub> Monitor**

CO<sub>2</sub> is of vital importance for plant growth and development. The Priva CO<sub>2</sub> Monitor measures and monitors the carbon dioxide concentration. It extracts air from the greenhouse through a tube. Offering excellent digital precision, the Priva CO<sub>2</sub> Monitor can be extended and is easy to calibrate.

### **Priva E-measuring box**

The Priva E-measuring box is a low-maintenance and precise modular electronic instrument for measuring the temperature, relative humidity and – if desired – the CO<sub>2</sub> level. The E-measuring box including CO<sub>2</sub> module is compact and has a built-in fan that continuously measures the air in the greenhouse.

### **Priva Groscale and Priva Root Optimizer**

Optimal humidity of the root zone helps to reduce diseases and prevents the build-up of salt in the substrate. The Priva Groscale performs high-precision weighing of the substrate. It calculates the exact evaporation

value based on the weight of the slab, the irrigation and the amount of drain water. The Priva Root Optimizer software subsequently ensures the optimal moisture balance in the substrate. The irrigation is then started automatically at the ideal moment depending on the climate and other greenhouse conditions, the crop health and the type of substrate.

### **Priva Plant Temperature Camera**

Measuring the plant temperature provides insight into the evaporation level in the crop. The plant temperature affects the speed of cell division, the cell differentiation (generative/vegetative) and the cell elongation. The plant temperature is a better indicator of all these processes than the greenhouse temperature. By controlling the heating, ventilation, shading, roof irrigation, humidification and/or CO<sub>2</sub> dosing based on the plant temperature, you can prevent overheating due to water stress or condensation from forming on the crop, while also saving both energy and CO<sub>2</sub>.

### Priva PAR-sensor

De PAR-sensor meet dat deel van het lichtspectrum dat de fotosynthese van planten activeert. Daardoor geeft deze sensor een zeer nauwkeurige indicatie van de groeibelichting. Via het invullen van de gewenste PAR-waarde kunnen de schermdoeken en de assimilatiebelichting aangestuurd worden.

### Priva Meteo mast

The Priva Meteo mast, which includes sensors for measuring the wind speed and direction, precipitation, temperature and amount of sunlight, transmits climate data to the process computer. Meteo mast is a standard tool for every grower and can be extended with additional sensors.

### Priva Precipitation sensor and Precipitation Intensity sensor

A fast and accurate measurement of the amount of precipitation is very important in controlling the ventilation and maintaining a stable greenhouse climate. This solution optimally combines a precipitation sensor, which detects whether it is raining, with a precipitation intensity sensor in order to control the optimal position for the air vents.

### Priva Outdoor RV sensor

The Priva Outdoor RV sensor measures the relative air humidity outside the greenhouse, which can differ significantly from the humidity inside the greenhouse. The data from the indoor and outdoor measurements supports optimal control of the greenhouse climate.



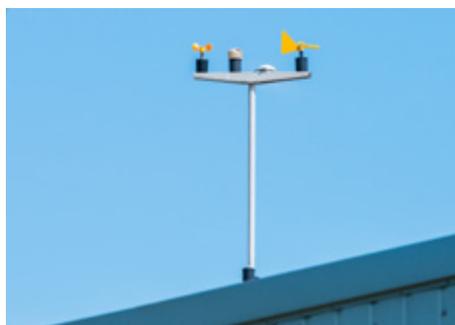
### Priva Irradiation sensor

The Irradiation sensor measures the outward heat emission of the greenhouse. More heat is lost on sunny days than when it is cloudy. To reduce heat losses from the greenhouse, the sensor ensures that the screens are closed sooner or opened later under clear skies. This prevents damage to the crop and also saves energy.

For more information or for a complete overview of all the available sensors, feel free to contact us!



Priva Plant Temperature Camera



Priva Meteo mast



Priva Groscale

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