HortiMaX PT Sensor

- Alarms based on high and low Plant Temperature
- Control based on Plant Temperature supported by MultiMa and Clima 500
- Less crop stress, higher production and improved quality
- Better use of thermal screens

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Precise infrared plant temperature readings

HortiMaX's plant temperature sensor allows you to accurately measure the temperature of your crop. The PT sensor measures the temperature of a representative number of plants in an area of 5 to 10m². Since the crop temperature tends to differ significantly from the ambient temperature, the PT sensor enables you to better monitor and control your crop's development. It does so by measuring the temperature at the top of the crop, which to a large extent determines the crop's growth rate. Precise crop temperature readings allow you to control your glasshouse climate more effectively. If the incoming or outgoing radiation rises above a certain value, the PT sensor shows you if the crop temperature is either too high or too low.

Infrared sensor

The warmer an object is, the more infrared radiation it emits. An infrared sensor measures this radiation and uses it to determine the current temperature. The benefit of this type of sensor is that it doesn't need to be in physical contact with your plants, preventing damage to the crop or the measuring heads from detaching. An additional benefit is that a larger area can be measured simultaneously, providing a reliable reading of the average crop temperature.

Latest enhancements

Thanks to a waterproof rating of IP67 and a lens quality highly resistant to harmful substances, the PT sensor is perfectly suitable for applications in a glasshouse environment. The PT meter comes with a mounting bracket, so you can keep the PT sensor aimed at the plant area you wish to measure.

Control based on plant temperature

The adjustable weighting factors in the Clima 500 and MultiMa climate computers enable you to program how the plant temperature measurement should affect climate control in relation to the ambient temperature measurements. The MultiMa even allows you to set different weighting factors for ventilation, heating and screening control. Climate control based on both the plant temperature and ambient temperature have produced excellent results in the field. Studies by the Wageningen University and Research Centre (WUR) in the Netherlands confirm these findings.

Saves energy and increases production

It's a fact that a constant plant temperature is most conducive to growth. The PT sensor offers you new control options to achieve a constant plant temperature and, therefore, increase production. Other applications include the ability to control thermal screens based on the plant temperature. This increases the duration that the screens are kept closed, which in many cases leads to considerable energy savings.

The PT sensor is a valuable addition to your climate control system. If used effectively, this sensor will enable you to improve crop quality, increase production and save energy. The PT sensor allows you to closely monitor plant conditions by not only displaying the plant temperature, but also the current Vapour Pressure Deficit (VPD). The PT sensor is especially useful in thermal screen control, climate control in closed glasshouses, supplementary lighting control and in combination with new types of roofing materials.

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