

PT Sensor

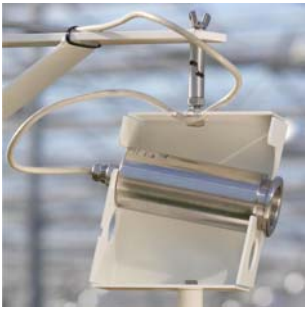


- Allows your control system to generate alarms based on the min. or max. PT (Plant Temperature)
- Enables PT-based climate control if connected to MultiMa or Clima 500
- Reduces crop stress
- Increases production
- Improves crop quality
- Allows thermal screens to be used with greater efficiency



Optimize control with our advanced infrared plant temperature sensor

HortiMaX's plant temperature sensor allows you to accurately measure the temperature of your crops. 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 helps you to monitor and control your crop's development. It does this 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 the glasshouse climate more effectively. If the incoming or outgoing radiation is above a certain level, the PT sensor shows you if the crop temperature is either too high or too low.



PT sensor

The PT sensor is a valuable addition to climate control. If used effectively, this sensor will enable you to improve quality, increase production and save energy.

The PT sensor enables you to closely monitor plant conditions by not only displaying the plant temperature, but also showing 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 if combined with new types of roofing materials.

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 does not need to be in physical contact with any of the plants, preventing damage to the crop or the measuring heads detaching. An additional benefit is that you are able to measure a much larger area at once, providing you with a much more accurate reading of the average crop temperature.

Latest enhancements

The new PT sensor includes a number of technological improvements:

- The quality of the lens has been enhanced, making it more resistant to harmful substances.
- The sensor's waterproof rating has been improved from IP65 to IP67, so it is even better equipped to deal with glasshouse conditions.
- Other modifications enable a number of PT sensors to be connected to the same signal cable. In the future, more and more use will be made of this so-called 'bus system', so fewer cables will be required.

Since the new PT sensor is cylindrical, a special mounting bracket has been designed for it. This mounting bracket comes standard with the PT sensor and allows you to position the sensor so it is aimed precisely on the desired surface area.

Climate control based on plant temperature

Adjustable weighting factors in the Clima 500 and MultiMa climate computers enable you to configure exactly how the plant temperature measurement should affect climate control in relation to the other temperature measurements. The MultiMa even allows you to set different weighting factors for ventilation, heating and screening control. Experiences from the field have shown that control based on both the plant and air temperature produce excellent results. Studies by the leading Applied Plant Research organisation in the Netherlands confirm these findings.

Saves energy and increases production

It is a fact that a constant plant temperature is most conducive for growth. The PT sensor offers you new ways of achieving 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.

More information?

For more information, please contact HortiMaX directly (phone: +31 (0)15 362 03 00) or one of our dealers near you. You can also visit our website at www.hortimax.com