



CLIMATE SENSORS

These sensors measure:

- ✓ Room temperature (RT10)
- ✓ Light between 400-720 NMO (Quantum sensor Q21)
- ✓ Solar radiation (SC21B)
- ✓ Pot temperature (PF5 (PF10))
- ✓ Flow temperature (E10)
- ✓ Light in lux (Photo cell LF2)



Correct measurement of actual plant conditions

Sensors need to measure climate conditions following the same principles by which plants perceive the environment. For example, the light sensor Q21 measures the light in light quantum in exactly the same way that plants 'see' light. One consequence of this is that the screens open in the morning when the plants use the available light, and not based on our assumptions.

Durability

Sensors must be durable. Climate is a considerable part of plant production, and the energy expenses are often dependent on the sensor reports about climate conditions.

Temperature sensors must therefore be of good quality. Correct climate conditions can influence greatly the speed and quality of pot plants and vegetables. This is why an expensive but durable and stable measuring sensor pays for itself in a very short time.

Placing of the sensors

Correct placement of the sensors is also important. For example, the temperature sensor must not be placed above a heating pipe or by a gangway, and flow sensors are to be installed some distance away from the heat valve.

A well-adapted climate is a condition for prime quality plants. Good and accurate sensors are of great importance for integrating and optimal climate into the climate control.



SPECIFICATIONS / CLIMATE SENSORS

Room temperature (RT10)

RT10 is a temperature sensor for measuring of the air temperature. Normally used as alarm sensors. The sensor is placed in the middle of the greenhouse, minimum 2 m from the central gangway and approximately 20 above the plant tops.

Article: 210200

Quantum sensor (Q21)

Q21 is a quantum sensor - also called a full spectrum sensor - that measures the nanometres between 370 nm and up to 710 nm. It is particularly suitable for controlling LED lights, but also for measuring light inside and outside the greenhouse. It measures and indicates how many μmol ($\mu\text{mol m}^{-2}\text{s}^{-1}$) there are from the sun or LED.

Article: 307190

Photo Cell (LF2)

LF2 is a photo cell, which contains a light dependent resistance and it is used for measuring visible light. LF2 must be placed so that exposure to shade from buildings or the like is avoided.

Article: 171500

In-pot sensor (PF5, PF10)

PF5 and PF10 are sensors used to measure the soil temperature in a pot. In the PF10, which has two sensors, the pot temperature becomes the medium.

Article PF5: 231200

Article PF10: 231300

Flow temperature (E10)

E10 is a pipe temperature sensor used to measure the flow temperature of a heating pipe.

Article: 90230600

Service

By inspecting your sensors at least twice a year by a service technician, you can avoid unexpected costs from, for example, incorrect readings from a temperature sensor that cause heat loss, reduced plant quality and varying climate conditions. The need for accurate measurement and easy serviceability shows yet again the importance of investing in a quality DGT by Senmatic sensor.

Please see also the product leaflets for Humidity sensor RTV and RTF.

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Version: 20092023

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