



**GEZONDE KAS**  
 > GESUNDES GEWÄCHSHAUS <



# STEP MONITORING

During cultivation the whole greenhouse system is scanned on-line and location specific for the presence of:

- Threatening pests and diseases
- Disease indicators
- Environment factors that can influence pests and diseases

## MONITORING ENVIRONMENT FACTORS

The measurement of environment factors that can influence pests and diseases is done with wireless sensor networks for climate and water management. Water content, EC and pH in the soil and temperature and air humidity are measured.



## MONITORING FOR PESTS AND DISEASES

This is done in 2 steps: on macro scale and on micro scale. This enables the detection of diseases often before disease symptoms are visible with the naked eye.

### STEP 1: MACRO-SCALE MONITORING

The whole greenhouse is monitored globally at crop level until a spot is identified that needs special attention. This is done with macro-scale monitoring products:

- CF camera
- Multispectral image sensor
- Electronic nose
- Spore collector



As soon as macro-scale monitoring has identified a suspected spot, step 2 follows, micro-scale monitoring

### STEP 2: MICRO-SCALE MONITORING

The identified spot is analysed more specifically at the level of leaf, stem or plant using the micro scale monitoring products:

- Nsure plant vitality test
- Luminex detection tests



After micro-scale monitoring, macro scale monitoring starts again.



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