

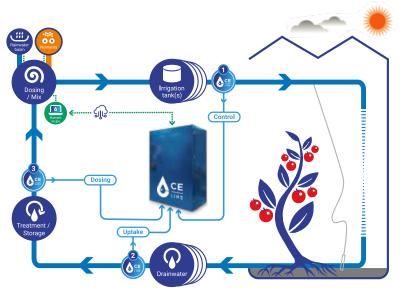
## **Automatic nutrient measurement**

## Complete control of water and nutrients...

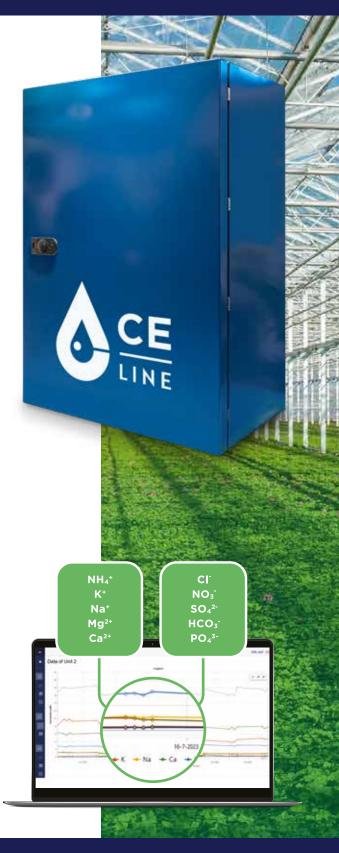
CE-Line offers an innovative solution for automated nutrient measurements designed for horticulture, providing a seamless "plug & play" experience for monitoring essential nutrients in both irrigation and drain water.

The integration of CE-Line into the greenhouse water system ensures effortless sampling and it independently performs fully automated cleaning and calibration cycles. This streamlined process not only guarantees data accuracy at laboratory-quality levels, but also accelerates the availability of crucial information. Within just one hour, precise concentrations of macronutrients in mM/L or mg/L are readily accessible, facilitating both manual and automated dosing of the optimal nutrient mix.

## ... resulting in optimization and risk reduction



Avoiding the risks of over- and underdosing, CE-Line enhances crop yields, facilitates precise crop planning and enables a fully closed water system. This not only conserves water but also minimizes nutrient waste, and therefore costs. With multiple daily measurements and cloud-based accessibility, CE-Line ensures continuous operational reliability.

















## **Technical information**

| Specifications                   |   |
|----------------------------------|---|
|                                  |   |
| General Information              |   |
| Dimensions (LxHxD)               | 1002 mm x 1081 mm x 424 mm                                    |
| Weight                           | 90 Kg   |
| IP rating                        | IP54  |
| Power                            | 600W  |
| Measurement Information          |   |
| Measurement time per sample      | 60 minutes  |
| Measurement components           | Charged components, see list of elements on front page        |
| Unit of concentration            | mM/L, mg/L or similar   |
| Concentration range              | 0.05 mM - 30 mM   |
| EC range                         | 0.1 - 10.0 mS/cm  |
| pH range                         | 4 - 9   |
| Filtration                       | 0.1 - 0.5 micron required, equipment available                |
| Data                             |   |
| Data storage                     | Cloud database  |
| Data visualisation               | Cloud portal, display interface                               |
| Accuracy                         | >95% *  |
| Repeatability                    | >95% **   |
| Reagent Set                      |   |
| Capacity                         | Suitable for 1 month with 8 measurements per day              |
| Refill cycle                     | Monthly   |
| Shelf life                       | 1 month after opening. Unopened, store at a cool place < 10°C |
| Replacement method               | Manual replacement  |
|                                  |   |
| Maintenance Measuring Instrument | Carrie and a sintenance (seminard on DIV often twining)       |
| Maintenance                      | Semi-annual maintenance (serviced, or DIY after training)     |
| Installation requirements        |   |
| Location                         | Inside, water treatment room, no direct sunlight              |
| Environmental conditions         | Between 5°C - 45°C and 10% - 90% humidity                     |
| Fixture                          | On skit or wall   |
| Method                           | Bolts (included)  |
| Communication                    | 230V AC, ethernet   |
| Distance to measuring point      | Location dependent  |
| Measuring point                  | Pressure: 0.3 - 1 Bar (maximum 3)                             |
|                                  | Flow: 20 L/min  |
|                                  | Connection: 40 mm to 6 mm on filter                           |
|                                  | Filtration: 0.1 - 0.5 micron, filter (advice) available       |

<sup>\*</sup> Compared to reference laboratories (WUR measurement)



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BTW NL865197350B01

<sup>\*\*</sup> Following validation certification NEN-EN-ISO/IEC 17025:2018nl