Vivent Biosignals:
Real-time monitoring of plant responses

Vivent Biosignals' crop health monitoring technology uses artificial intelligence to decode plants' own biosignals. We deliver real-time insights into crop health and identify specific abiotic stressors long before visible symptoms appear. An intuitive, interactive dashboard enables growers to analyze plant stress in real time—quickly, reliably, and with confidence. The system integrates seamlessly with climate control platforms such as Priva and Argus.

Direct Feedback from your plants

In Controlled Environment Agriculture (CEA), getting the details right makes all the difference. Even in well-managed greenhouses, plants can experience stress that isn't visible until yield or quality is already affected. What if your crops could tell you exactly when something is off—and what to do about it?

Our greenhouse monitoring technology gives growers real-time feedback directly from the plants. By continuously tracking plant responses alongside climate, irrigation, and fertigation settings, it helps you spot stress early and make targeted adjustments before problems escalate. This means fewer surprises, more consistent yields, better use of water and nutrients, and healthier crops overall.

Your plants alert you when:

Water uptake triggers stress, signaling the need to adjust irrigation settings.

Nutrient levels N, P, K, Ca, Mn or Fe require fine-tuning. .

LED lighting needs tuning to optimise growth or reduce energy costs.

Biostimulants are showing the desired effect.

Greenhouse climate conditions are limiting the optimal growth potential.

Receive plant feedback from your crops:

Tomatoes
Cucumbers
Peppers
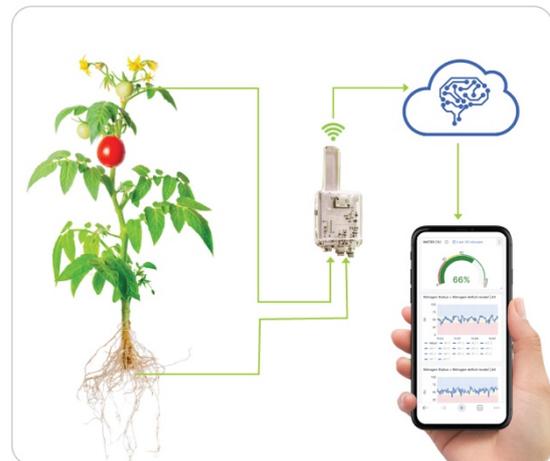**Strawberries**
Ornamentals

How it works

Constant communication between the roots and shoots

Plants react to stress or attacks by sending electrical signals throughout the plant so they can respond quickly—for example by closing stomata during water stress or activating defences when pests or diseases are present.

Vivent Biosignals' technology taps into these electrical signals to provide real-time insights into plant health. Small, non-invasive electrodes are attached to a representative group of plants.
The Vita biosensor captures these signals and sends them to the cloud. AI and machine learning then interpret the data, showing how plants are responding to climate settings, irrigation, fertigation, LED lighting, and crop treatments.

This means growers can detect stress before visible symptoms appear, make targeted adjustments quickly, and optimize conditions for higher yields, healthier crops, and more efficient use of water, nutrients, and crop protection.

Vivent SA
Rue de Mauverney 28
1196 Gland |Switzerland
www.vivent-biosignals.com

NL office
Sparrenheuvel 34C | 3708JE Zeist

Contact
Carl.rentes@vivent.ch
Phone: +31 (0)64 690 05 33

Erik.veenman@vivent.ch
Phone: +31 (0)62 812 97 87