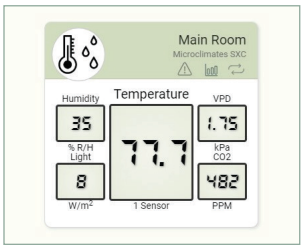
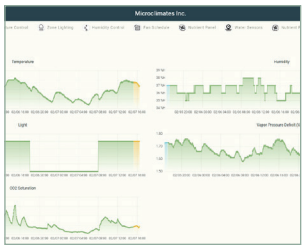
Automation delivers very optimal environment and cost reduction to indoor farms

The advent of automation technology has enabled the deployment of Smart Farming solutions that can drastically reduce the costs associated with indoor farming, while simultaneously optimizing and scaling the operations. To ensure ease of deployment, such a solution must be **simple to install and operate, and not require expensive wired connections**.

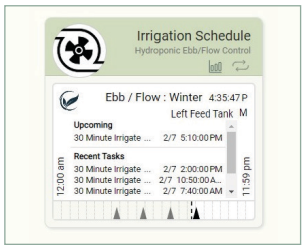
Veea and Microclimates have joined forces to bring Edge Computing technology to indoor farming, allowing for a cost-effective and expansive solution. By leveraging the enterprise-level computing and connectivity capabilities of VeeaHubs, this perfect combination provides a comprehensive and reliable solution for indoor farming automation.



Easily view and control sensor and equipment data with customizable dashboards.



Record trends over time as well as set alert tresholds and use data from multiple sources



Automate equipment based on sensor data as well as for different seasons, weather and time of day.

The Microclimates solution is designed to provide a universal control system that can automate the different climate control, lighting and irrigation systems, thus **reducing costs, maximizing efficiency and increasing crop value** - all of which are essential for staying competitive.

- Energy savings and improved sustainability
- Reducing operations and ownership cost
- Smart automation based on sensor data
- Timely alerts on criticial sensor detections
- Increased crop value and timely growth
- Expandable without expensive wiring

Indoor agriculture owners and operators can view and act upon the data themselves, as well as automate equipment based on various data points. The flexibility of the different types of sensor data that can be gathered, in combination with having total control of the actions taken by the system, allows operators to rest assured that their crops are in safe hands, so they can focus more on the bigger picture: growing their business.

Customer

Hurst Greenery

Partners

Veea, Trilogy and Microclimates

Project

20 Greenhouses, 130,000 Sq Feet at Westboro, MO

Solution

Veea Edge Platform supporting Microclimates Envrionmental Automation Solution

Outcome

- Better control & monitoring, including remote monitoring
- Warnings & alerts
- Increased revenue with healthier plants
- **Savings of more than $16,000 / year** on energy usage alone

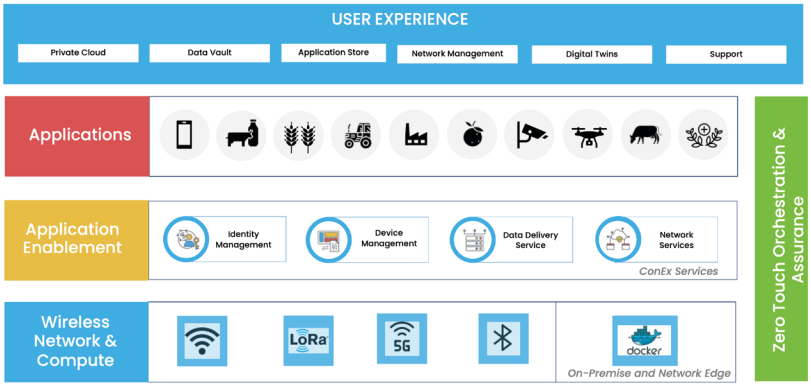
To learn more, please scan the QR code above.

Edge Computing: Cost-effective and scalable smart farms

Veea's Edge Platform allows for a cost-effective, secure and expansive solution without the need for expensive wiring. This makes the solution more cost-effective and easier to maintain, all while still providing the same level of accuracy and reliability. VeeaHubs support a wide range of IoT sensors and equipment, including LoRaWAN and SD-WAN, to convey IoT sensor data that farmers can use to understand & manage critical resources in real time.

FarmGrid™ from Trilogy: Award Winning Digital Agri-FoodPlatform

Veea and Trilogy have partnered with Microclimates, to package their combined precision agriculture solution with Microclimates's affordable, scalable universal control system that monitors temperature, humidity, CO2, watering and ambient light, which can include hundreds of sensors, with 24/7 monitoring and alerts.



With Trilogy's award-winning FarmGrid™ solution, enabled by Veea and enhanced by Microclimates, operators of indoor cultivation and farming, especially for high-value crops, benefit from private enterprise wireless connectivity (including 5G), wireless controllers that can be programmed to turn heaters and vents off and on, based on rules, and readings from temperature sensors which instrument greenhouse environments and feed autonomous systems.

The FarmGrid solution allows for **private wireless** for farm-wide connectivity, **wireless controllers** that can turn on/off heaters and vents based on rules, readings from **temperature sensors** to regulate the greenhouse environment and card-based dashboard from Microclimates to give the user full control over the system. The outcome of this partnership has enabled Hurst Greenery to have better control and local/remote monitoring of their systems with alerts and warnings. Hurst Greenery has seen an increase in net revenue as they have experienced energy savings of $16,675 per year since the deployment of the solution. This is a 40% year over year savings in cost reduction and with the addition of further automation, such as irrigation controls to reduce water consumption, Hurst is expected to increase their net revenue from operations by continuing expense reduction – all while producing much healthier crops as a result of the system's deployment.

TRILOGY

Trilogy is focused on digital transformation for agriculture, food security and sustainability. Trilogy launched FarmGrid™, a digital agri-food platform, to transform farming into a digital enterprise. The platform accelerates adoption of digital solutions by making available standardized digital infrastructure to a global ecosystem of innovative app developers. To learn more, please visit **www.trilogynet.com**

veea

Veea is an edge platform provider headquartered in New York City. Our team has extensive knowledge and expertise on content delivery and edge computing, and strive to make edge computing simpler. With over 80 patents in virtualization, containerization, edge computing and hyperconverged networks, Veea is a leader in this technology and is transforming the world to a smarter, more connected one from the device edge inward. To learn more, please visit **www.veea.com**

microclimates™ Environmental Automation

We specialize in all phases of data gathering and process control for climate controlled environments. Our core ingredient is an open data platform for connecting systems that were not intended to talk to one another. If your business relies on accurate climate management, you've come to the right place. To learn more, please visit **www.microclimates.com**