



**technotects**<sup>®</sup>  
the technology architects



# Headquarters Campus

# Technotects, Inc.

Consulting, Engineering and System Integration firm focused on the advancement of the Intelligent IIoT Edge for Industrial, Commercial and OEM clients

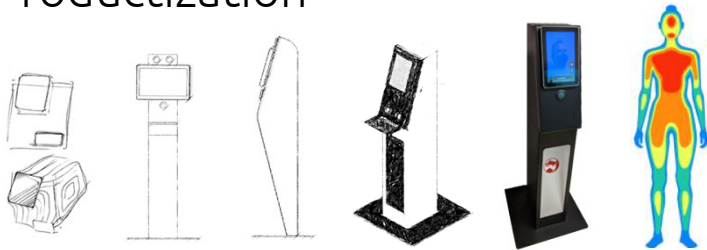


## Offices

- Founded in 1996
- US headquarters – Philadelphia, PA
- Off-shore offices – Pune, India

# Pilots and PoC Designs

- Ideation & Discovery
- Contract Research & Development
- Product & Application Review
- Concept Design
- UI/UX Designs
- Prototyping Lab with 3D Printing
- Component Sourcing & Selection
- PoC Assembly, Staging & Testing
- Pilot System Implementation
- Proof of Value Implementations
- Productization





## Smart Sensor Integration

- WiFi6, Bluetooth LE
- Long Range Wireless (LoRaWAN)
- Wirepas, ZigBee, RFID
- LPWA Narrowband IoT (NB-IoT)
- Cellular 3G/4G/5G
- Swarm, Skylo, Starlink & Iridium Satellite IoT
- IO-Link Industrial Smart Sensors
- Video Streaming AI Cameras



# Intelligent IIoT Edge

- Full Edge Stack Development
- Edge Data Collection & Conditioning
- Dashboards & Analytics
- Local Rules & Logic
- Alarms & Alerts Management
- UI/UX Designs
- Secure Device Connectivity
- Smart Sensor Integration
- Computer Vision AI



**DELL**  **NVIDIA** **intel.**

 **LOSANT**  **Telit Cinterion**  **ptc**  **LITMUS**

 **Node-RED**  **Grafana**  **influxdata®**  **docker**



## IIoT Cloud Platforms

- Industrial IoT Cloud Analytics
- Off-Site Storage
- Cloud-Cloud API
- Digital Twin Technologies
- Remote Device Management
- Fleet-Wide Data Aggregation
- Alert Notification & Management
- Cloud HMI Visualization



**LOSANT**



## Automation & Control

- Process Control Application Code
- CODESYS Integration
- HMI/UI/UX Development
- Device Communications
- Smart Sensor Integration
- Hybrid OT/IT Control Systems

**AVEVA**

**Ignition!**  
by inductive automation

**deviceWISE**  
EDGE



**EMERSON**

**CODESYS**

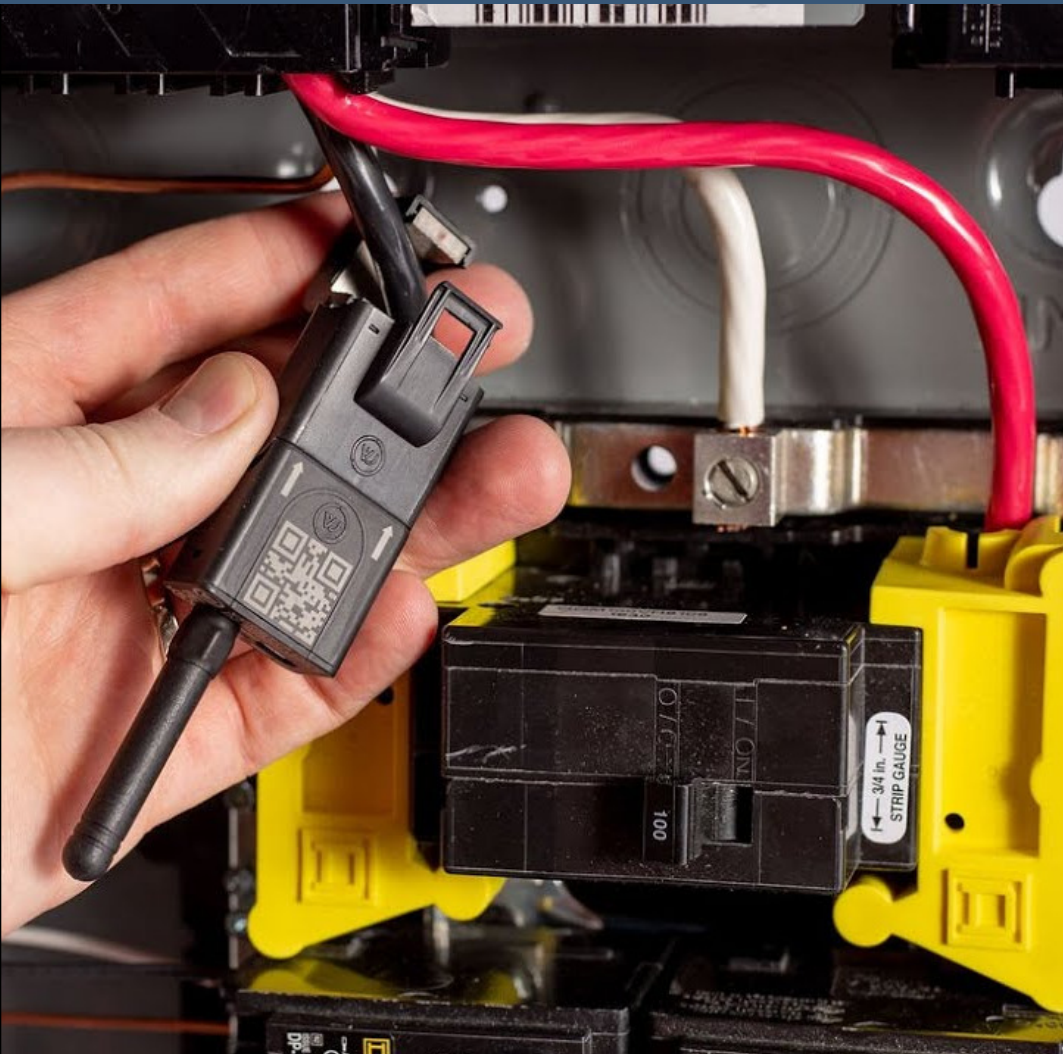


ifm efector

**Weidmüller**  
The Interface Partner

**HORNER**  
AUTOMATION GROUP





## Apps & Outcomes

- Mobile App Development
- Native & Responsive Web App Designs
- Windows, Linux, IOS and Android
- Multilingual Coding: .NET, C#, JAVA, JS, GO, PHP, Python, etc.
- New Concepts Design



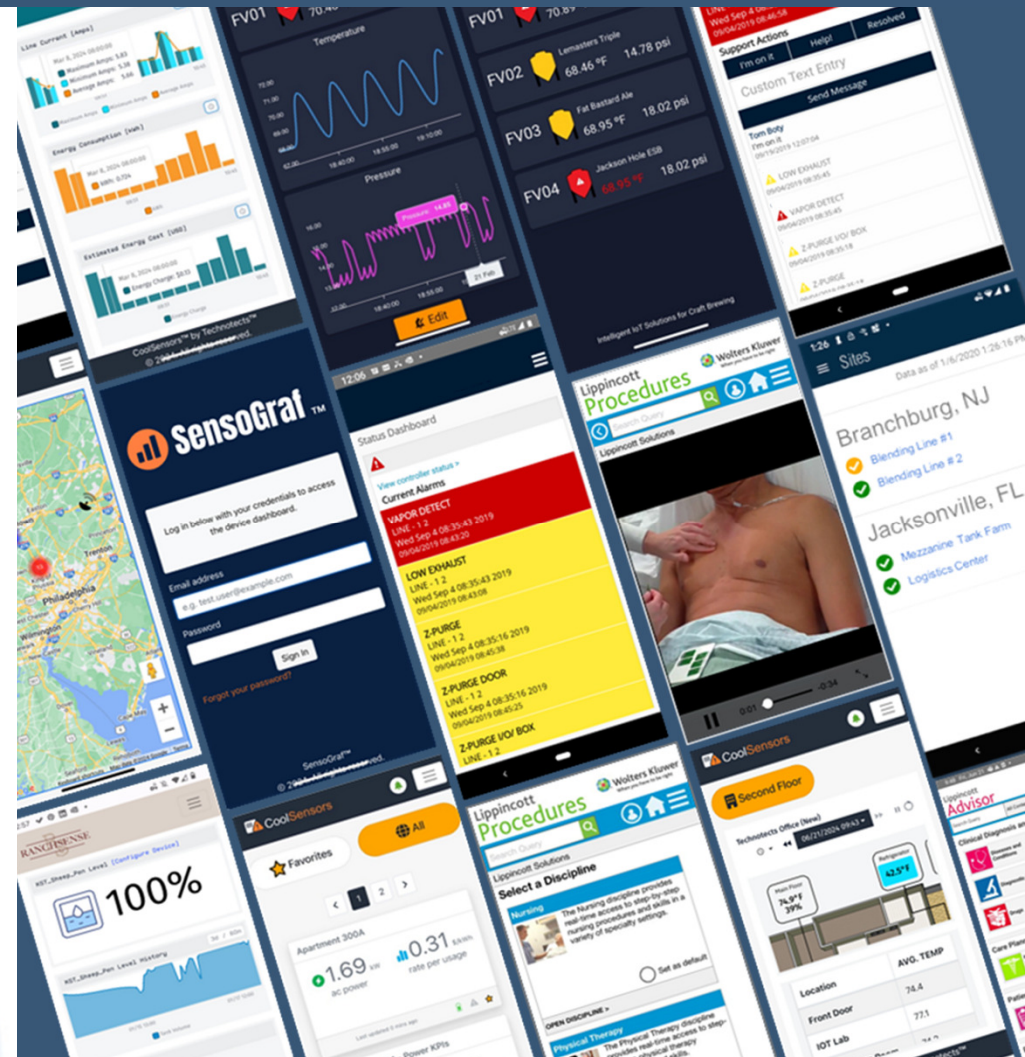
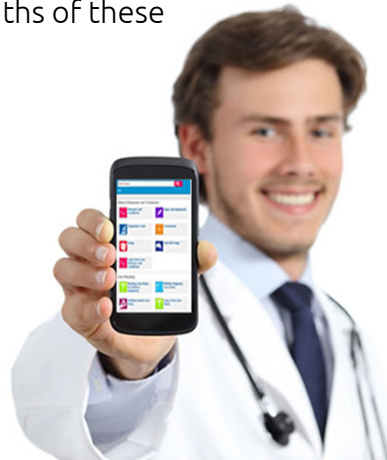


# Cross Platform App Design with Ionic Frameworks

- Cross-Platform Development
  - Single Codebase for iOS, Android and PWA
- Rich UI/UX Experiences
  - Designed to look and feel like native apps
- Native Device Access
  - Provide full access to camera, geolocation, file system, etc.
- Progressive Web App Designs
  - Providing offline capabilities and better web performance
- Angular, React & Vue Support
  - Our developers leverage the strengths of these frameworks
- Backend Integration
  - Robust APIs to fetch and send data



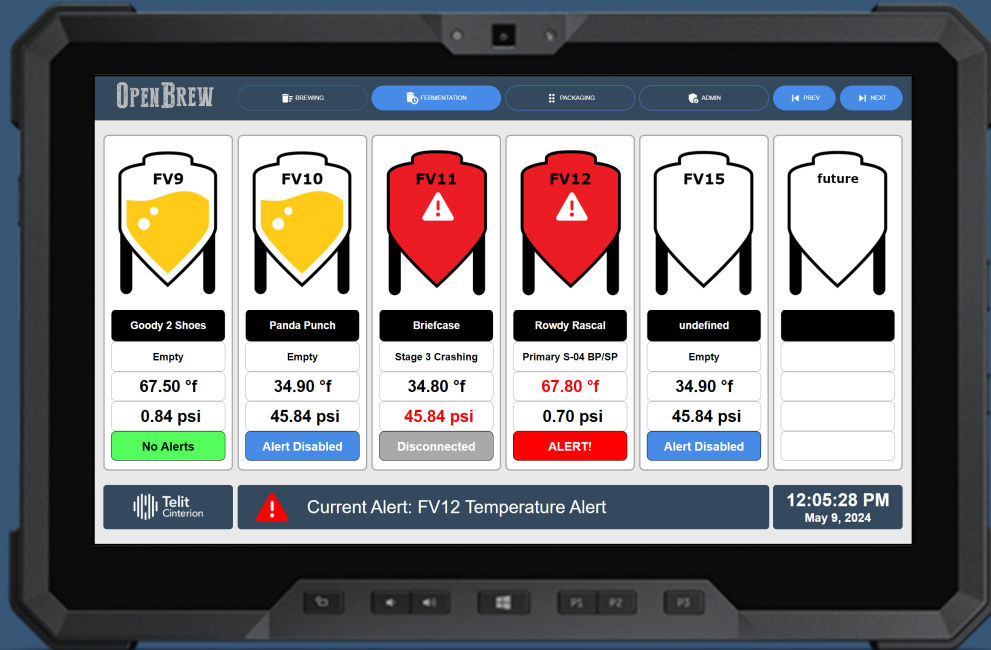
With Ionic, Technotects can leverage frameworks like Angular, React, or Vue, along with web APIs to deliver a native-like experience on both iOS and Android platforms



# IIoT Apps, Projects & PoCs

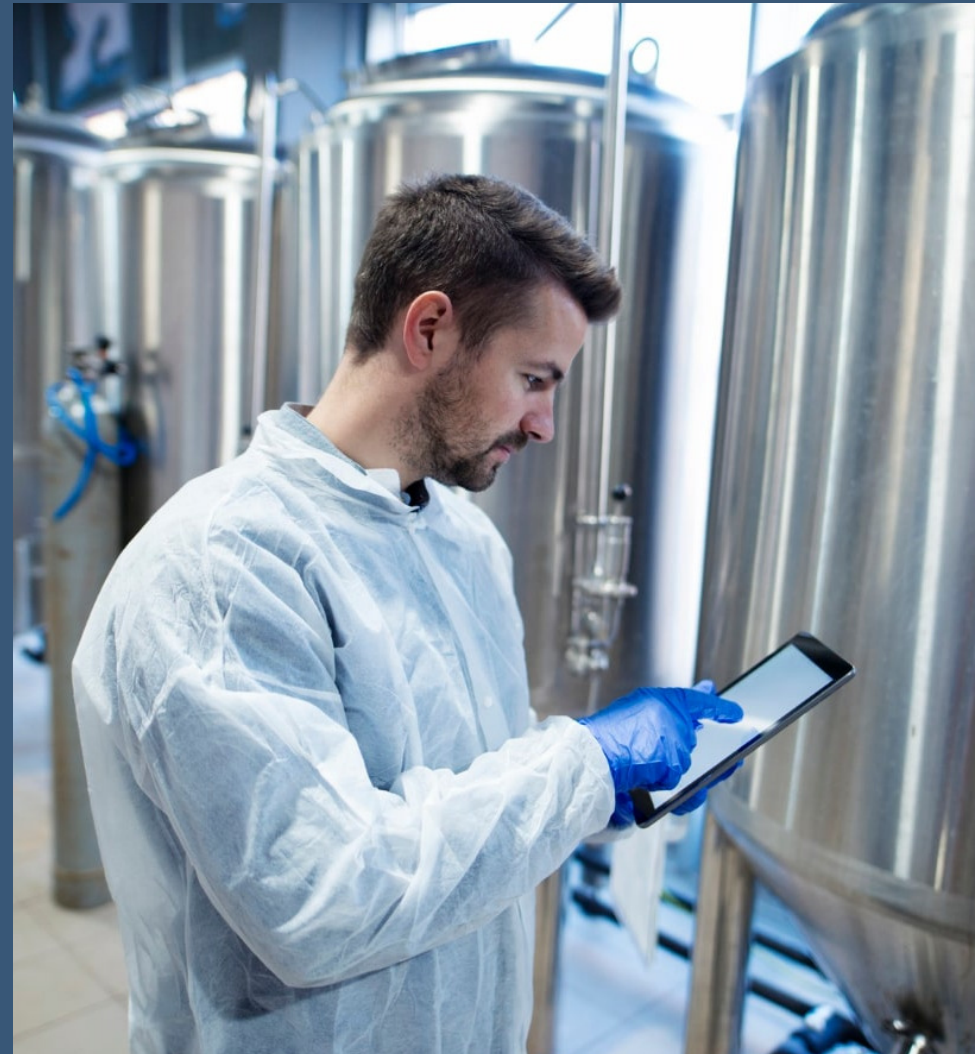
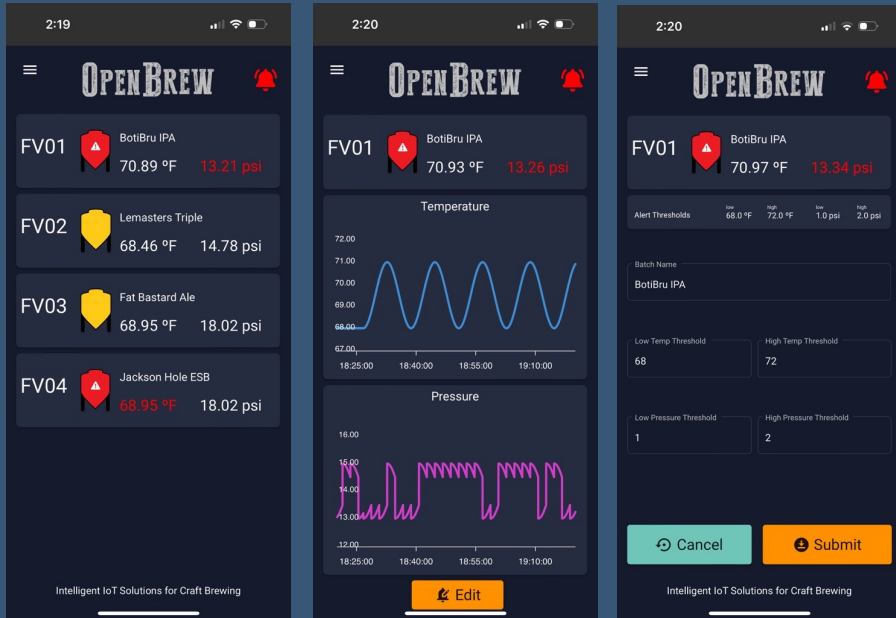
## Brewery Line Situational Awareness

deviceWISE AI/View and IO Link IoT sensor technology combine to identify and alert on undesirable brewing & canning conditions



## IIoT Apps, Projects & PoCs Brewery Line Situational Awareness

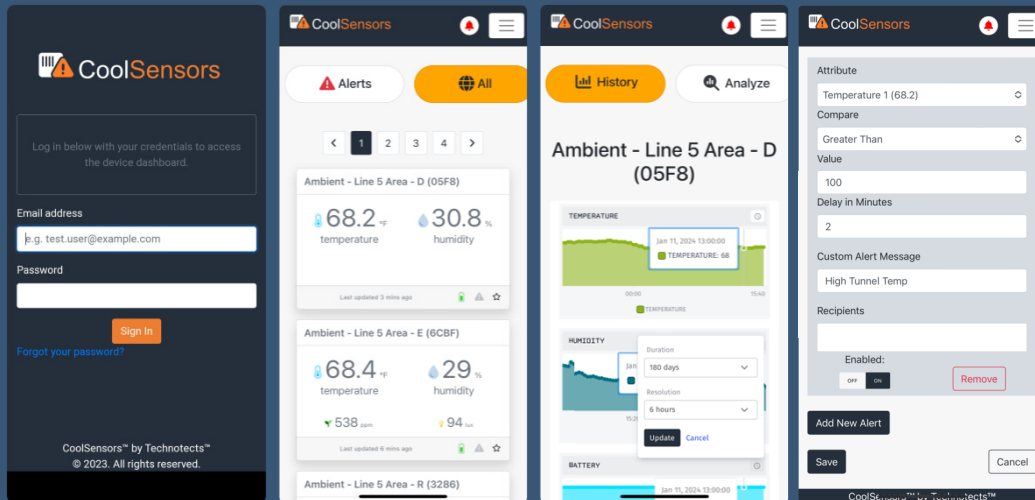
deviceWISE AI/View and IO Link IoT sensor technology combine to identify and alert on undesirable brewing & canning conditions



# IIoT Apps, Projects & PoCs

## Smart Facility Management

With wireless LoRaWAN sensors streaming to the CoolSensors cloud, facility managers can easily monitor, analyze and get alerts on crucial data from food freezers, beverage coolers, kitchen equipment, storage areas, restrooms, bars, dining rooms and outside facilities... anywhere, anytime... all from the palm of their hands



The image displays four screenshots of the CoolSensors mobile application interface:

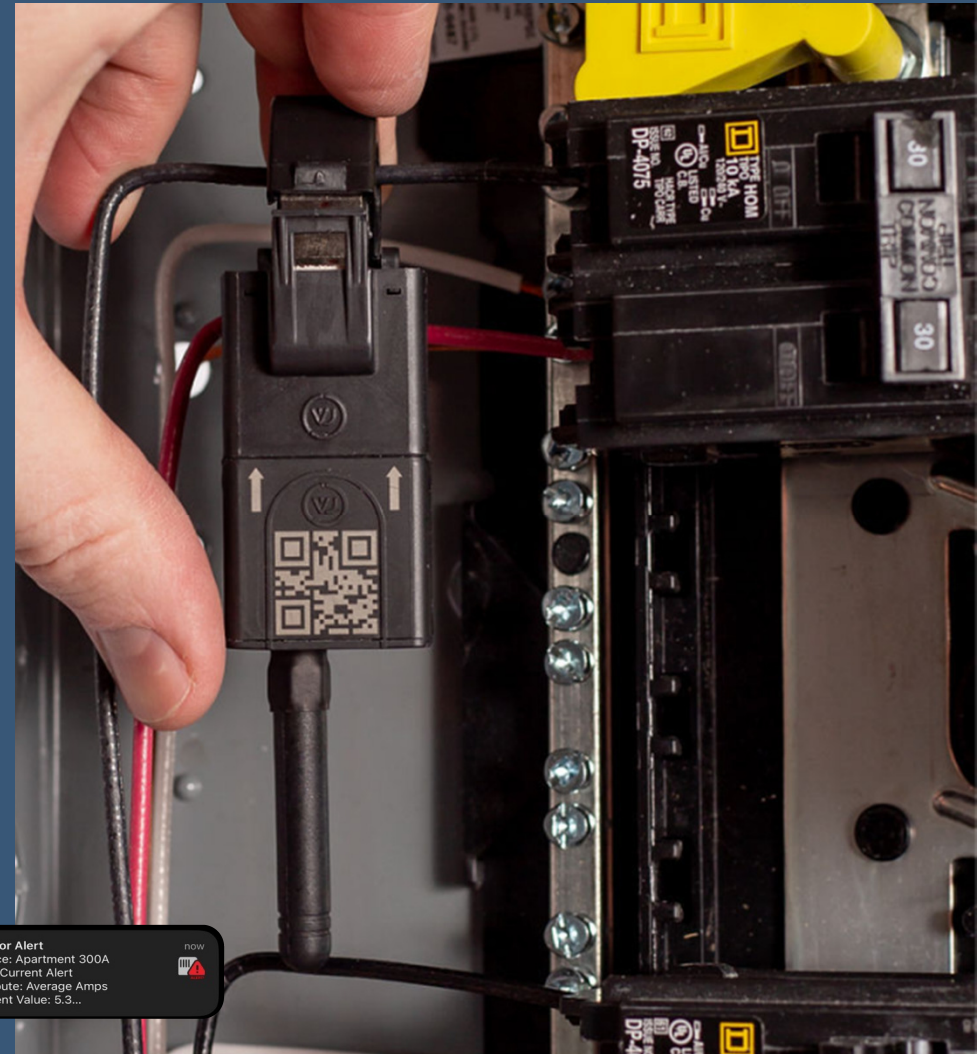
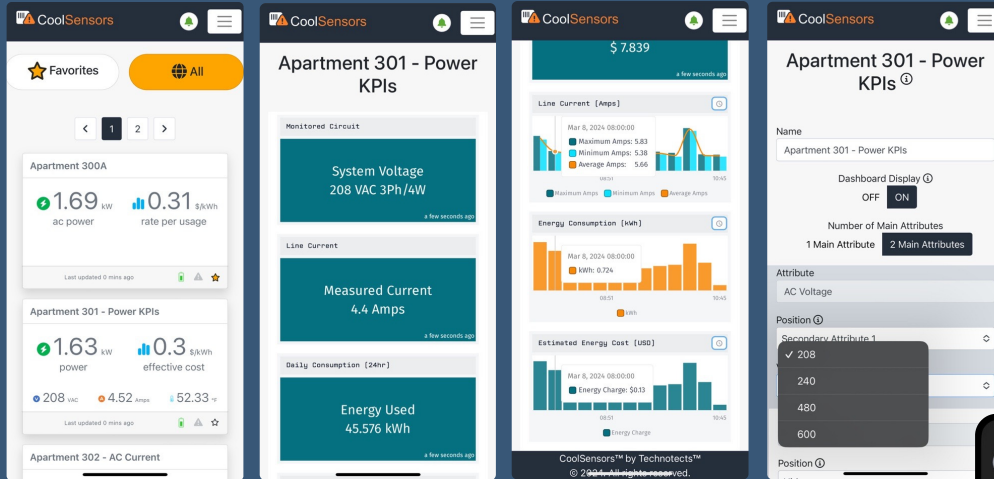
- Screen 1 (Login):** Shows the CoolSensors logo, a login prompt, and fields for Email address (e.g., test.user@example.com) and Password. Includes a "Sign In" button and a "Forgot your password?" link.
- Screen 2 (Alerts):** Displays a list of alerts for "Ambient - Line 5 Area - D (05F8)" with temperature 68.2 and humidity 30.8%. Below it, another alert for "Ambient - Line 5 Area - E (6CBF)" shows temperature 68.4 and humidity 29%. A third alert for "Ambient - Line 5 Area - R (3286)" is partially visible.
- Screen 3 (History):** Shows a graph for "Ambient - Line 5 Area - D (05F8)" with a temperature of 68. The graph includes a legend for TEMPERATURE and a "BATTERY" section at the bottom.
- Screen 4 (Configuration):** Shows settings for an alert, including Attribute (Temperature 1 (68.2)), Compare (Greater Than), Value (100), Delay in Minutes (2), Custom Alert Message (High Tunnel Temp), and Recipients. It also has "Enabled" (OFF), "Add New Alert", "Save", and "Cancel" buttons.



## IIoT Apps, Projects & PoCs

### Wireless Energy Monitoring

With wireless sensor ranges up to 10km, the CoolSensors™ platform from Technotects allows users to easily monitor, analyze and get alerts on crucial energy data from inside and outside the facility. Designed with snap-on wireless power sensors, the CoolSensors Energy application provides granular, up-to-the-minute, real-time energy data from equipment across your facility.

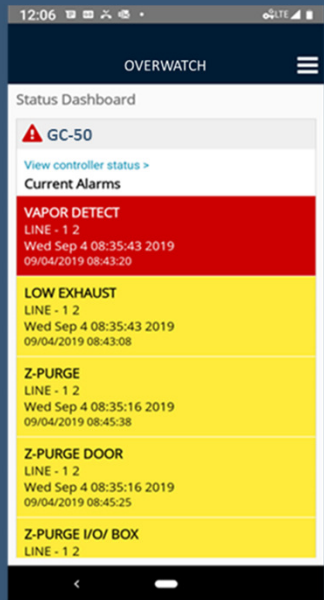


**Sensor Alert**  
 Device: Apartment 300A  
 High Current Alert  
 Attribute: Average Amps  
 Current Value: 5.3...

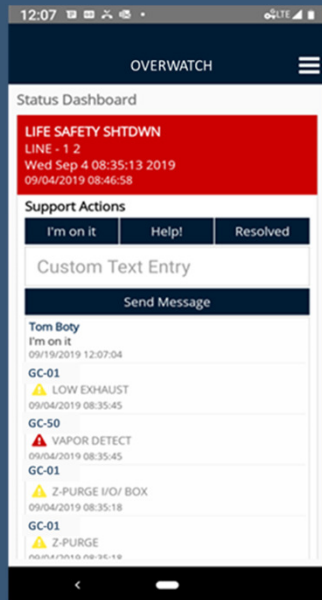
## IIoT Apps, Projects & PoCs

### Semiconductor SubFab Equipment Monitor

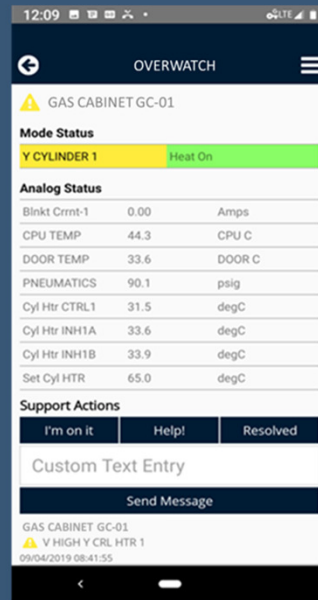
This mobile app is designed to reduce downtime and increase productivity through situational awareness and service team collaboration.



React with color-coded alarms



Resolve quickly with team messaging



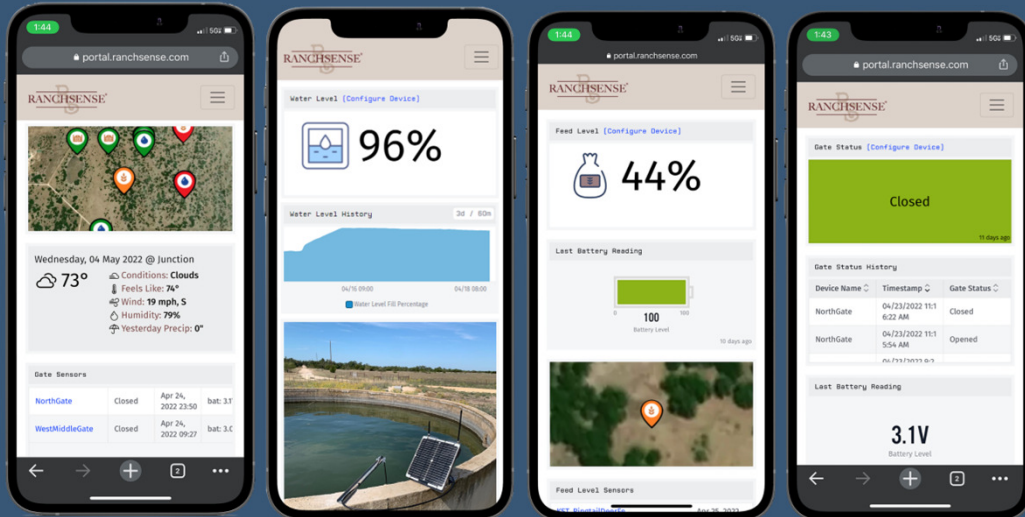
Monitor live data from 1000+ controllers



# IIoT Apps, Projects & PoCs

## RanchSense: Satellite-based IoT

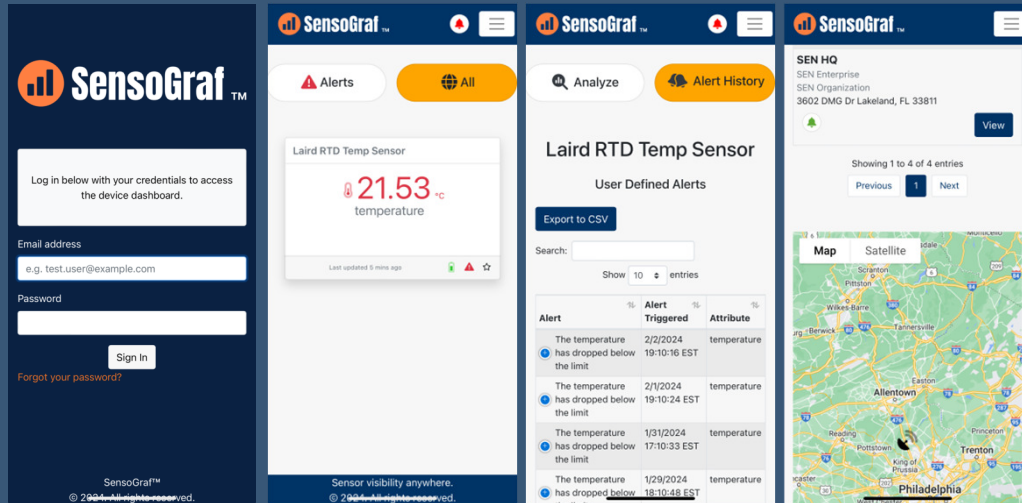
Ranching is hard work, but it can be a little easier if you have help from RanchSense satellite IoT technology. Wireless IoT sensors keep a watchful eye on the critical resources of the property so that ranchers can prioritize higher value tasks over the time they spend performing routine tasks such as checking water and feeder levels.



## IIoT Apps, Projects & PoCs

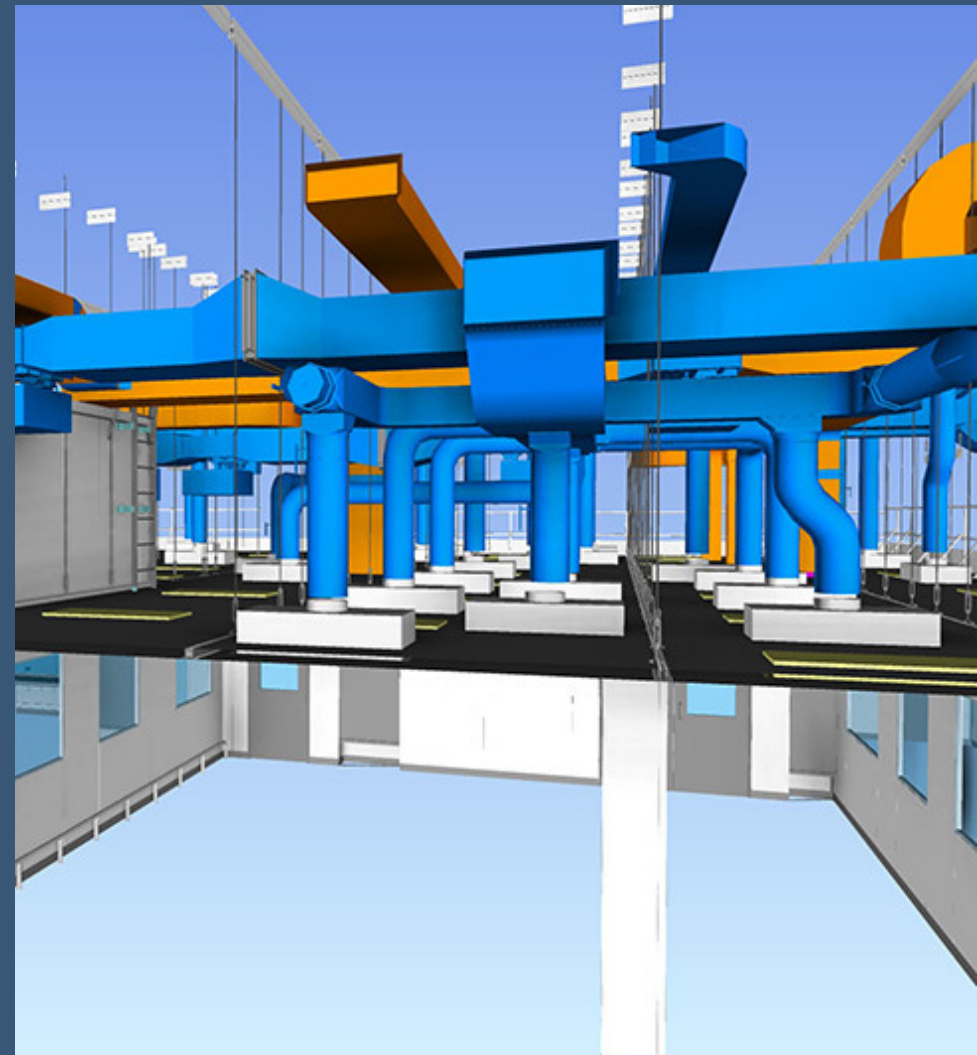
### SensoGraf Air Flow & Pressure IoT

Using wireless LPWAN sensors that broadcast signals directly to the cloud, the SensoGraf solution from Sensocon provides up-to-the-minute air flow, pressure, temperature, humidity and other data points from HVAC systems, clean rooms and other industrial applications.



The image displays four screenshots of the SensoGraf mobile application interface:

- Screen 1 (Login):** Shows the SensoGraf logo and a login form with fields for "Email address" (e.g., test.user@example.com) and "Password", a "Sign In" button, and a "Forgot your password?" link.
- Screen 2 (Alerts):** Displays a "Laird RTD Temp Sensor" with a current temperature of 21.53 °C. It includes a "Sensor visibility anywhere." notice at the bottom.
- Screen 3 (Alerts History):** Shows a table of "User Defined Alerts" with columns for Alert, Triggered, and Attribute. The table lists several temperature-related alerts.
- Screen 4 (Map):** Displays a map of the Allentown, PA area with a location pin and a "View" button. The map shows major roads and nearby towns like Allentown, Trenton, and Philadelphia.





# IIoT Apps, Projects & PoCs

## Bulk Chemical Tank Level & Fill Automation

By combining PLC interlocking, barcoding, pressure, level, and nozzle sensors into an Industrial IoT Edge system, a chemical processor can now properly manage the tank filling operation with the goal of increasing productivity, track batches, reducing filling errors by validating product source and destination, and reducing spillage due to overfilling.

**symrise** branchburg
**Bulk Tank Summary**
4:45:52 PM

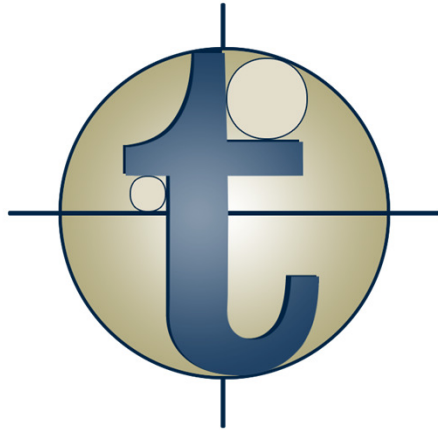
99001 - 903766	99002 - 130744	99003 - 613031	99004 - 130520	99006 - 131030	99007 - 131414	99008 - 131337	99009 - 600040	99011 - 113554
1414	1688	1342	383	800	271	582	706	701
99012 - 103908	99013 - 130817	99014 - 903971	99015 - 660408	99016 - 654040	99017 - 600278	99018 - 164419	99019 - 130077	99020 - 157503
701	701	701	383	383	383	383	383	383
99021 - 130453	99022 - 699713	99023 - 103247	99024 - 130990	99025 - 130966	99026 - 105656	99027 - 131486	99028 - 690965	99029 - 107297
701	383	383	271	271	271	701	706	706

**symrise** branchburg
**Bulk Tank Details**
3:08:48 PM

Kilos to FULL		Tank Level		Tank Number	
3904		20.81 %		99023	
Kilos to EMPTY				Product Code	
1026				103247	
				Product Name	
				HERBAFLORAT	
				Level	
				16.05 inches	
				Batch	
				20100406	
				TANK MISMATCH	
				← Back to Tank Summary	





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