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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

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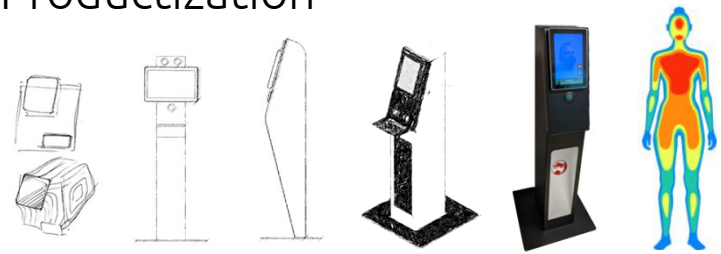
Pilots and PoC Designs

- 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



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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

PEPPERL+FUCHS SENSING YOUR NEEDS · ifm efector · DRAGINO
LoRaWAN · Bluetooth SMART · Wirepas · zigbee · RFID
5G · SWARM · skylo · iridium connected · NB-IoT · IO-Link

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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

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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

aws
Microsoft Azure
Telit Cinterion
LOSANT
heartbeatRM

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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
CODESYS
ifm efector
EMERSON
Weidmüller The Interface Partner
HORNER AUTOMATION GROUP

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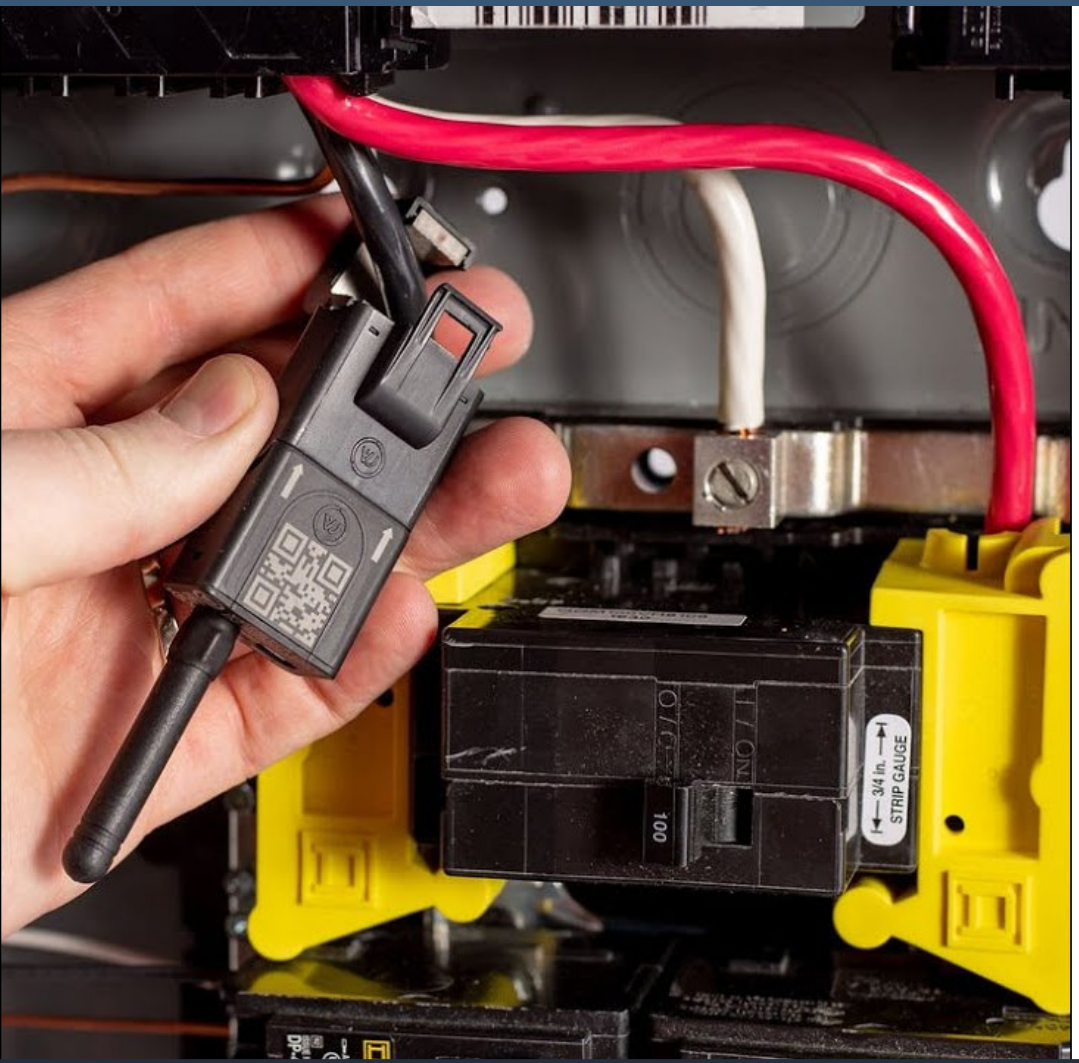

Apps & Outcomes

- 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

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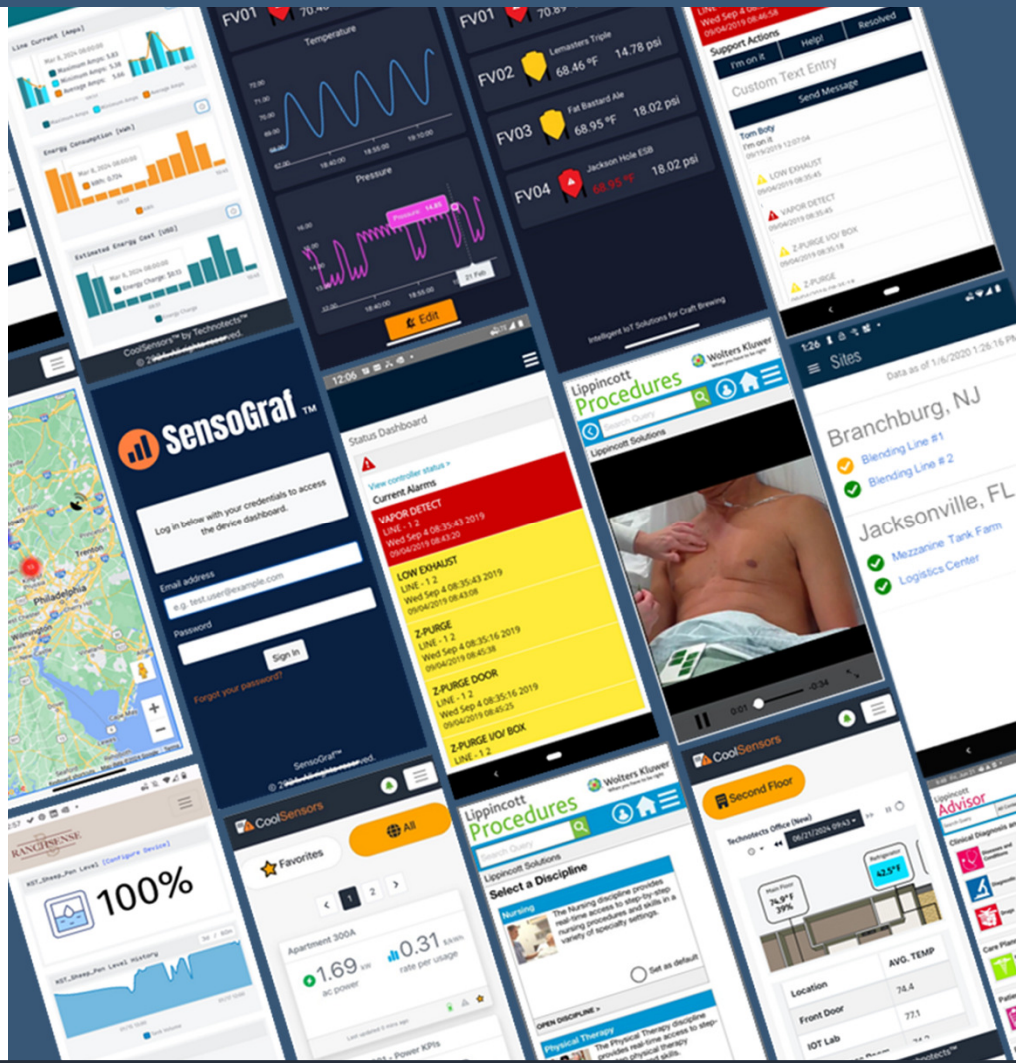
Cross Platform App Design

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

IONIC

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



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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

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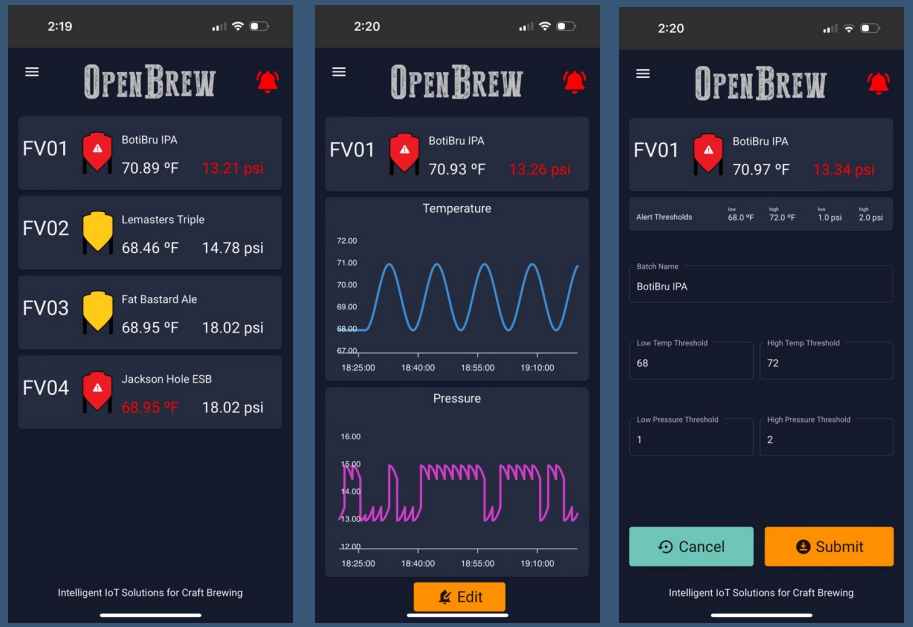

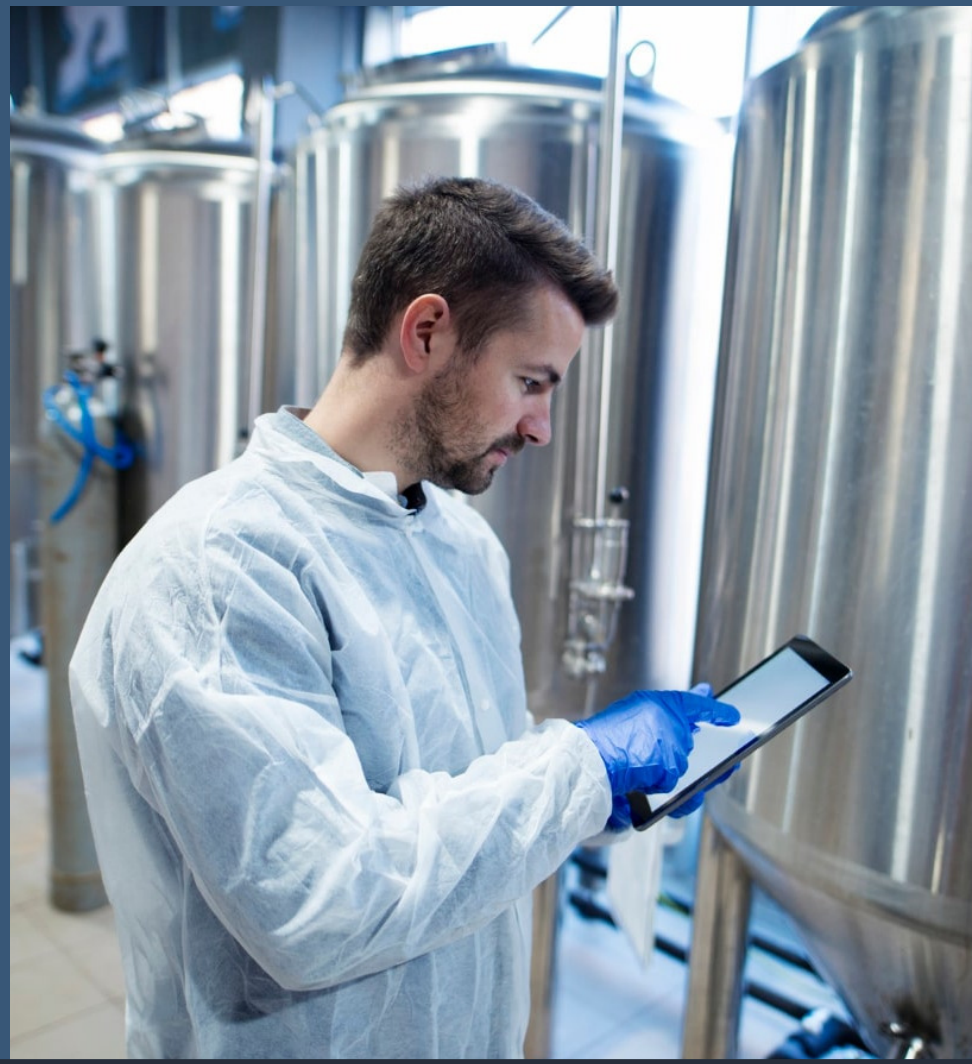

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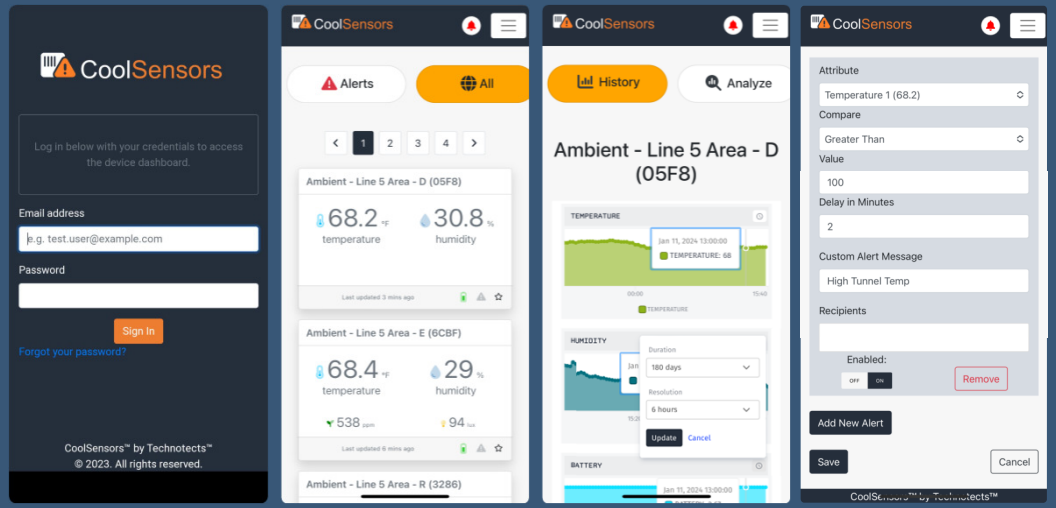
IIoT Apps, Projects & PoCs

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



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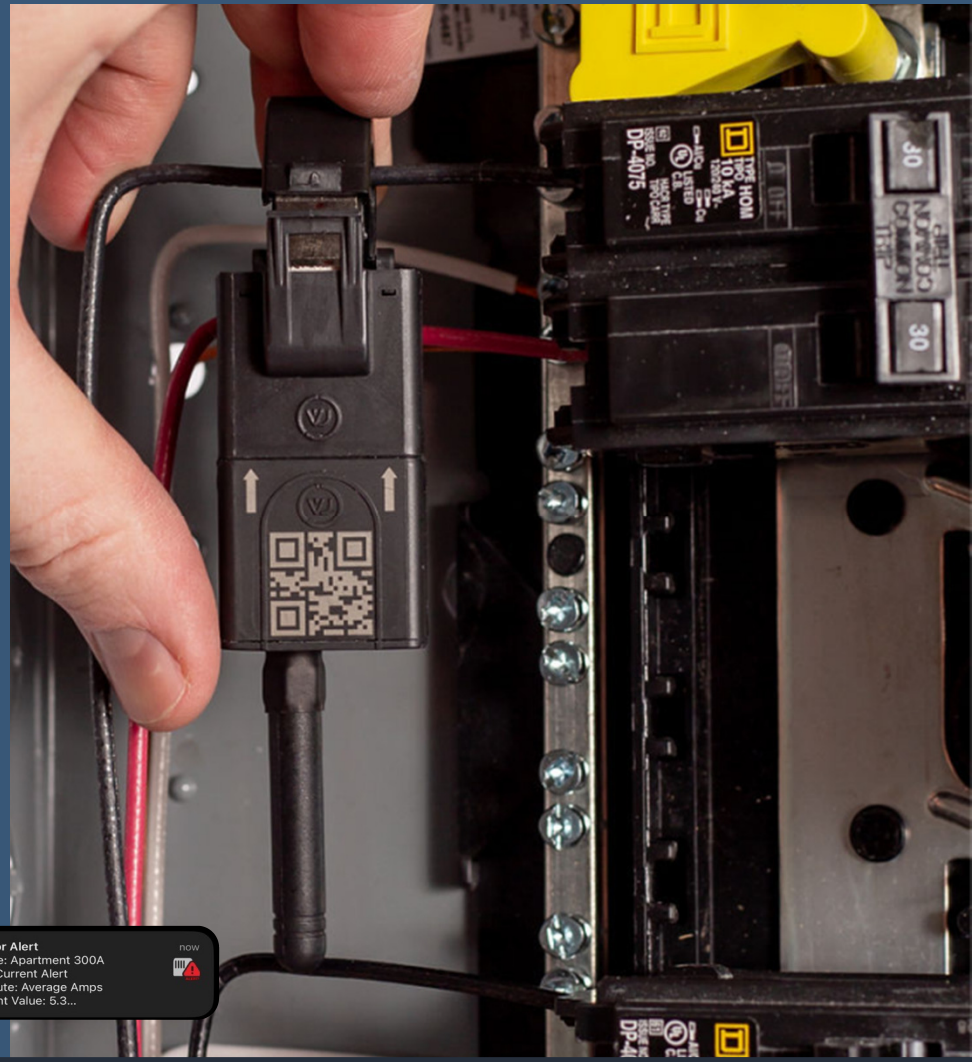
IIoT Apps, Projects & PoCs

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.



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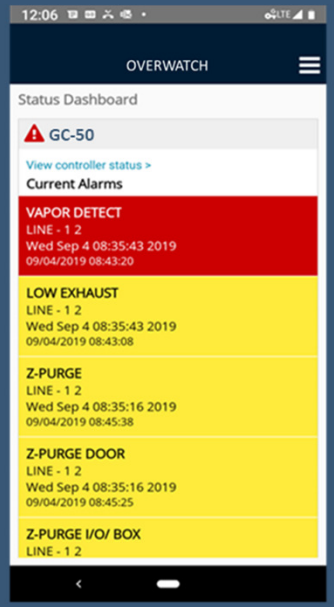
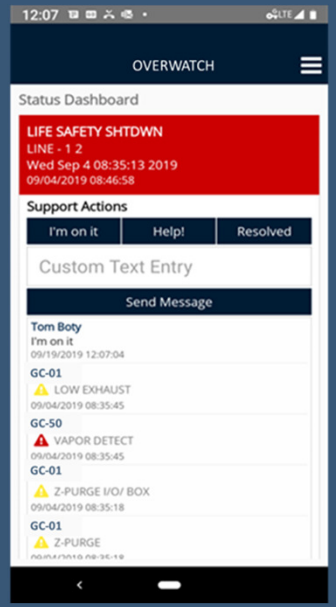
IIoT Apps, Projects & PoCs

Semiconductor SubFab Equipment Monitor

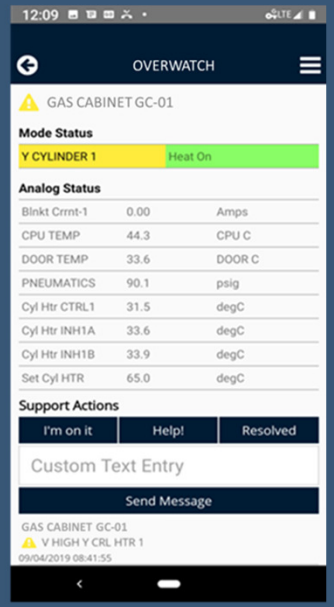
This mobile app is designed to reduce downtime and increase productivity through situational awareness and service team collaboration.



React with color-coded alarms



Resolve quickly with team messaging



Monitor live data from 1000+ controllers

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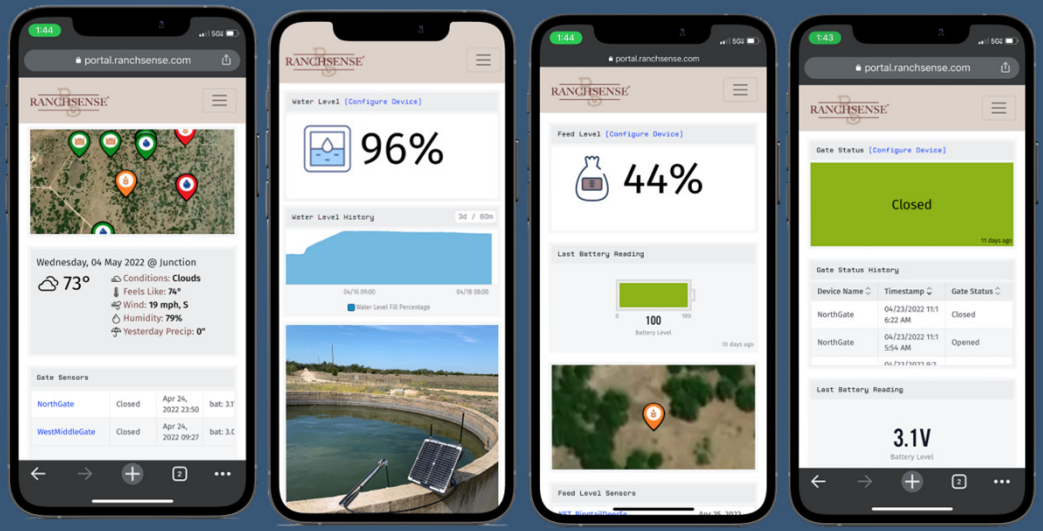
IIoT Apps, Projects & PoCs

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.



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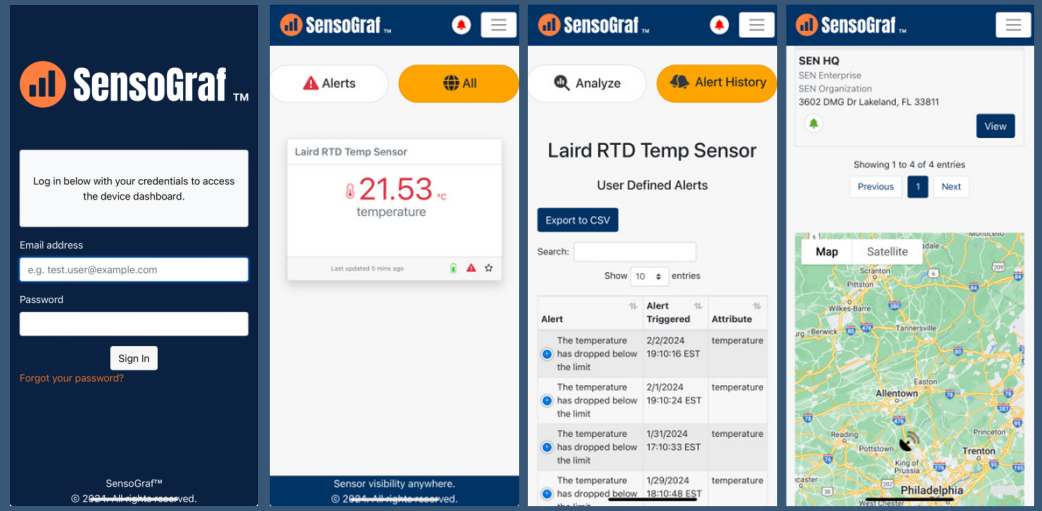
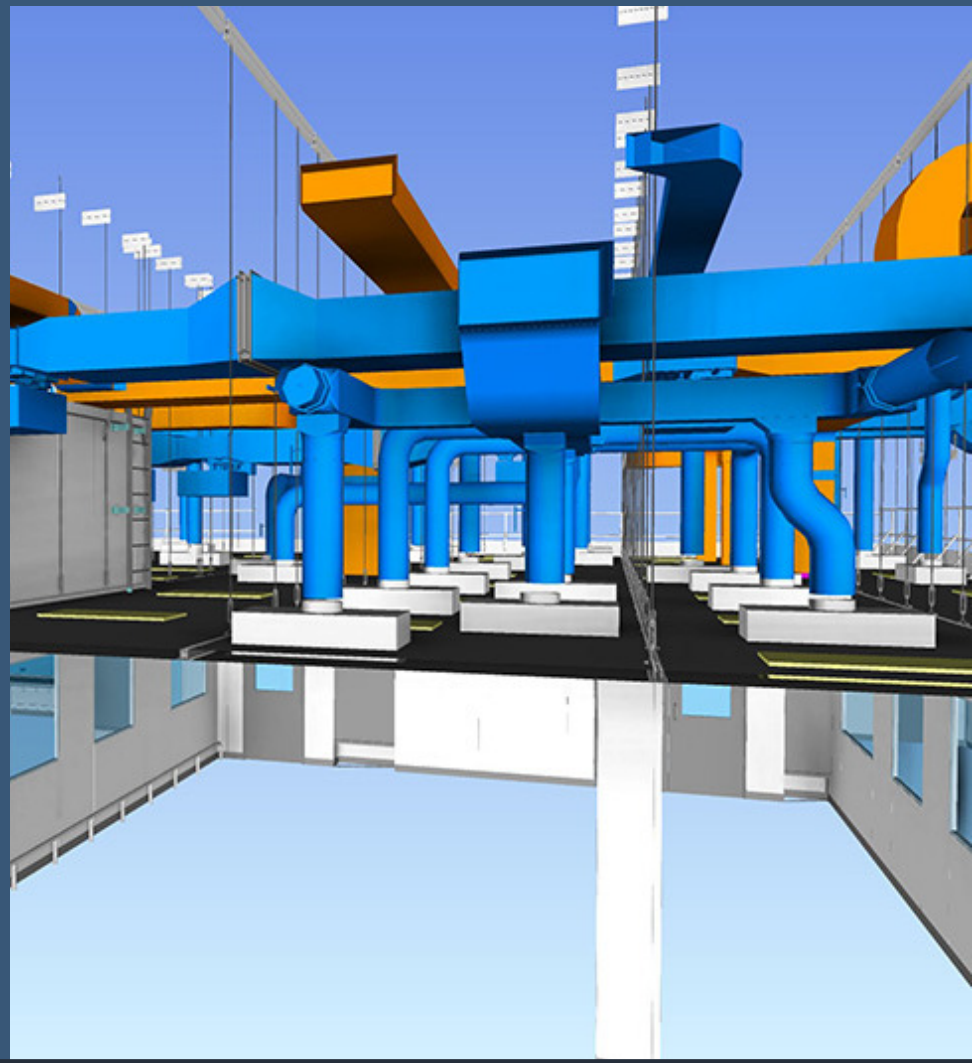
IIoT Apps, Projects & PoCs

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.





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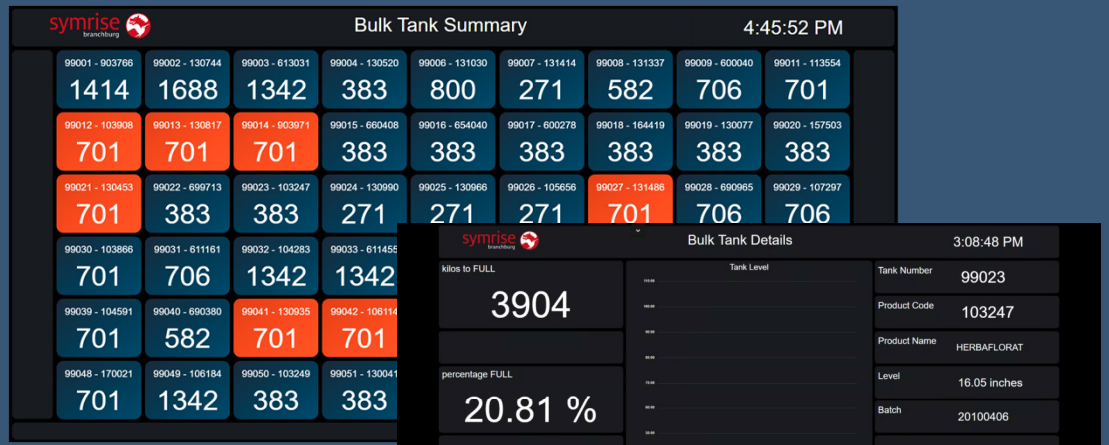
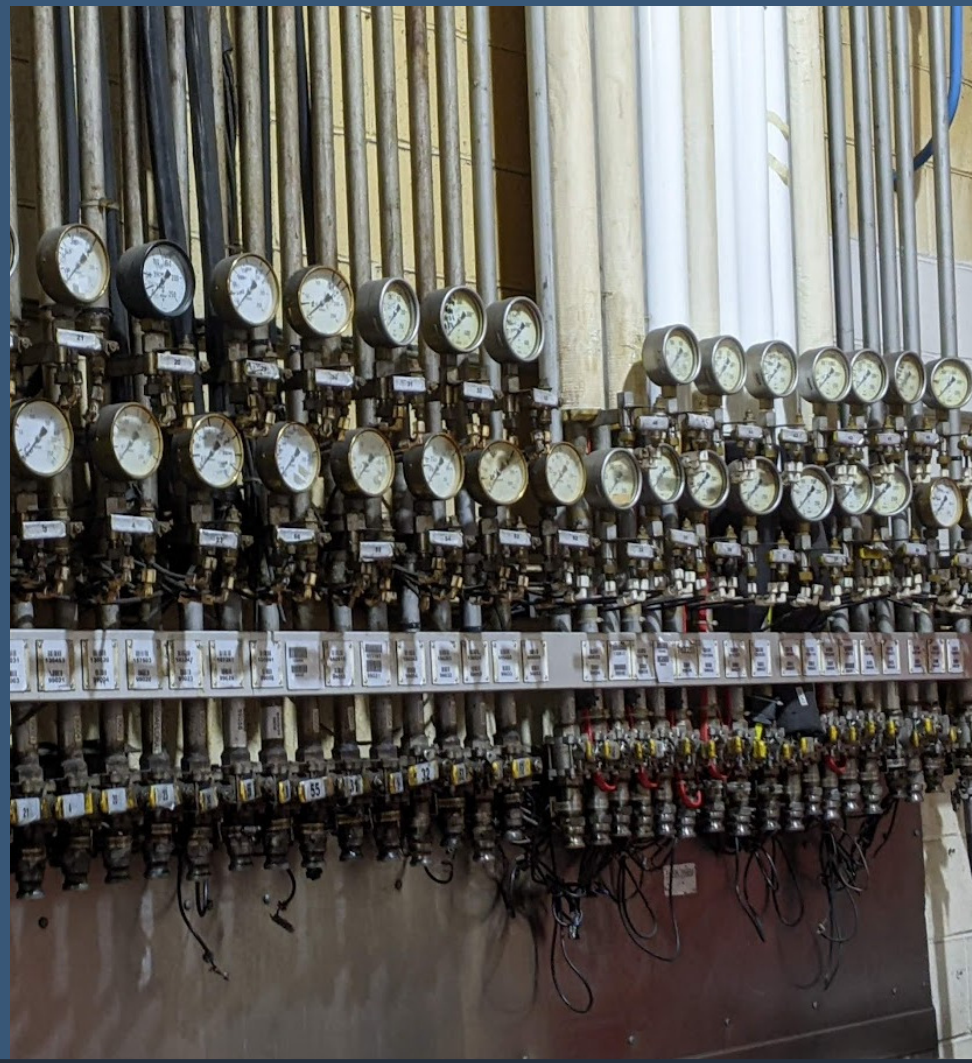
IIoT Apps, Projects & PoCs

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.





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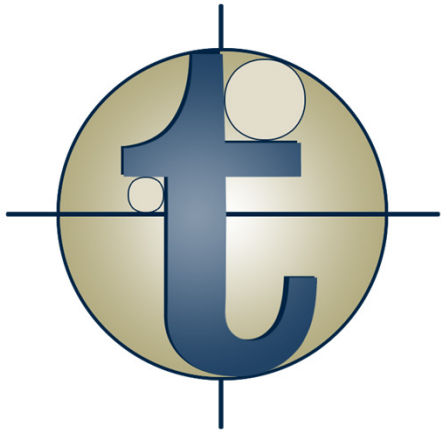

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