TEKTROL
Technology Solutions

IoT Monitoring Solution

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Flow Measurement

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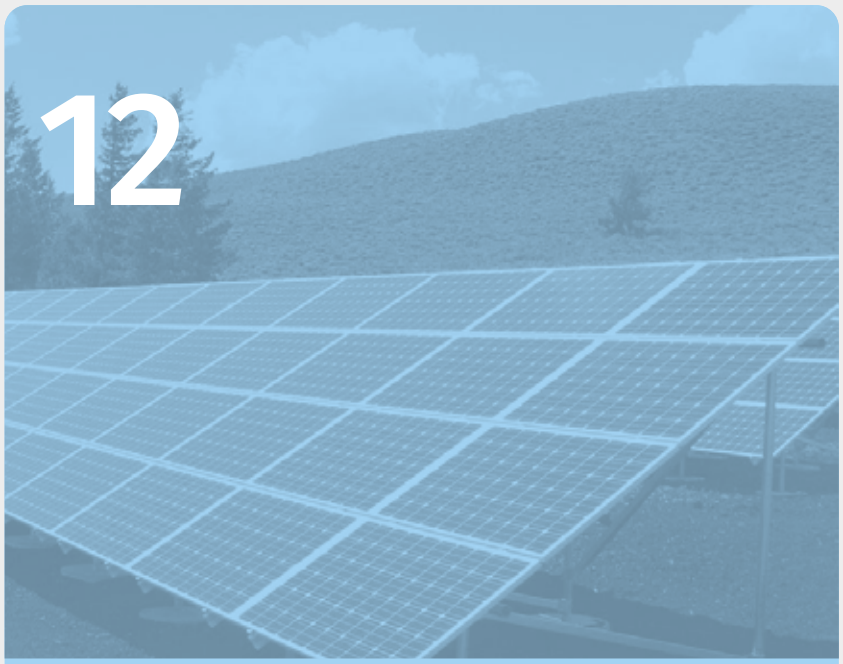
Level Measurement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IoT Monitoring Solution

Introduction

Internet of Things (IoT) is Tek-Trol LLC's one stop solution that helps connect your products, plants, systems remotely, enabling you to tackle the wealth of data achieved with advanced analytics. IoT connects real things to the digital world and provides powerful industry applications and digital services to help drive business success. It automates, optimizes and future-proofs system to achieve new heights of digital performance.

Tek-Trol's Tek-Cloud IoT Solution platform connects across wide range of applications with multiple industries worldwide with comprehensive instruments, hardware and software solutions. This system is fully featured with powerful graphing features, voice / SMS / email alarm callouts, and data import and export support, all packaged in an all-inclusive package that brings remote field data to you anytime, anywhere.

Tek-Cloud IoT platform is used worldwide and can monitor sensors for Oil & Gas, Environment, Water & Wastewater, Smart City and more. We provide 24/7 phone support directly to an experienced technician to help with end device setup, product design, and certifications. Our support goes beyond just offering you an IoT platform but also helping you select the right devices/sensors for your application as we are part of your team.

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Flow Measurement

Tek-Trol's IoT Solution for Flow measurement collects and measures flow rate, static pressure, differential pressure, temperatures, historical data, alarms & events, including critical emergency of hazardous events, and startup, shutdown, and preventative maintenance.

IoT Flow meter solutions not only estimate the total flow amount but allows you to utilize real-time data to predict and adjust consumption. The real-time analysis allows immediate recognition of catastrophic events such as a burst pipe. The analysis also draws out events to establish predictive failure behavior and potentially prevent massive material loss.

Predictive Maintenance:

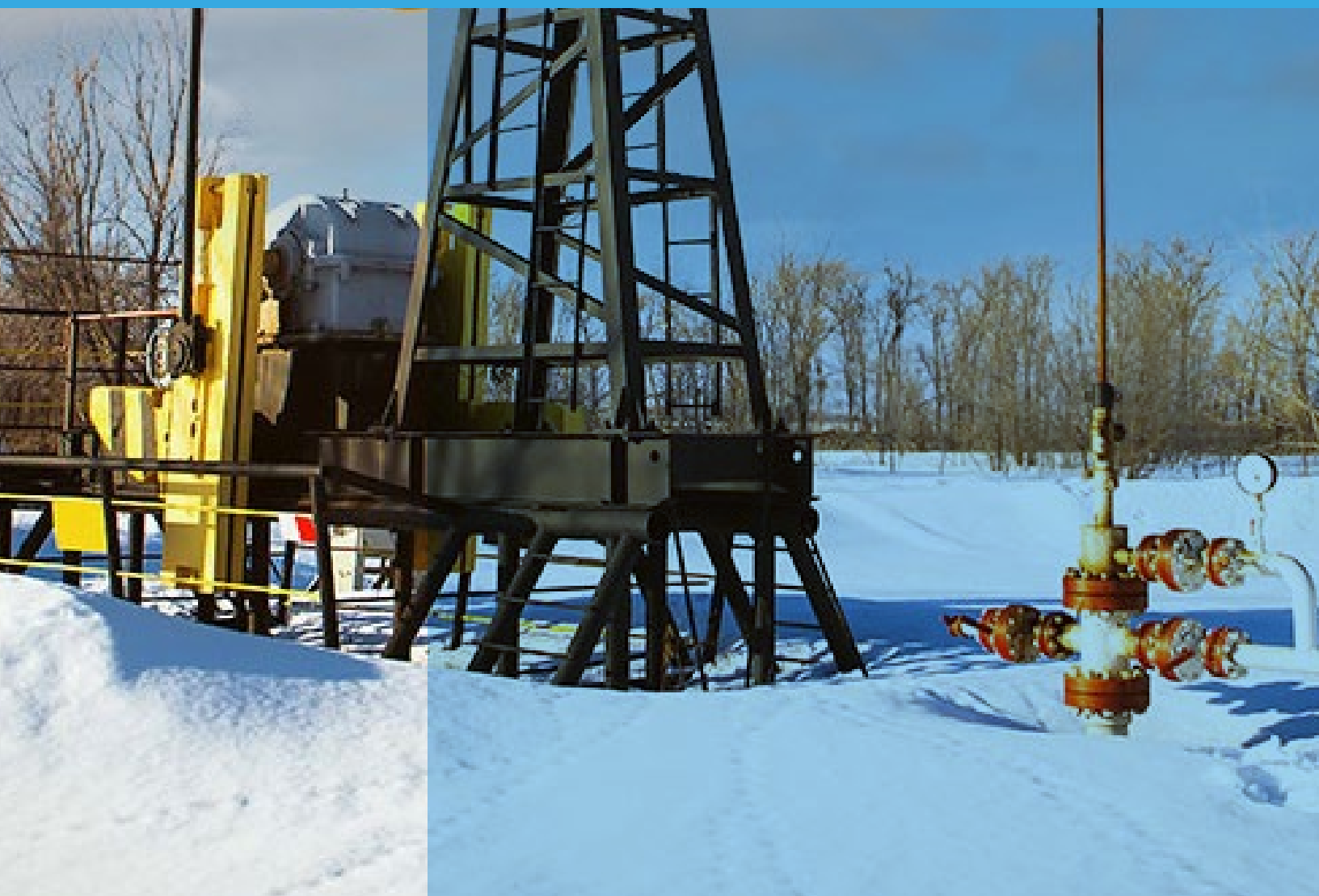
The collected measurement data trends show analysis of data points associated with the working and performance of the flow meters; their condition-based maintenance and health can be analyzed. Furthermore, the data points can also be used to determine the future possibilities of meter failure. Therefore, companies take proactive measures to conduct inspection procedures and make necessary repairs to the flow meter.

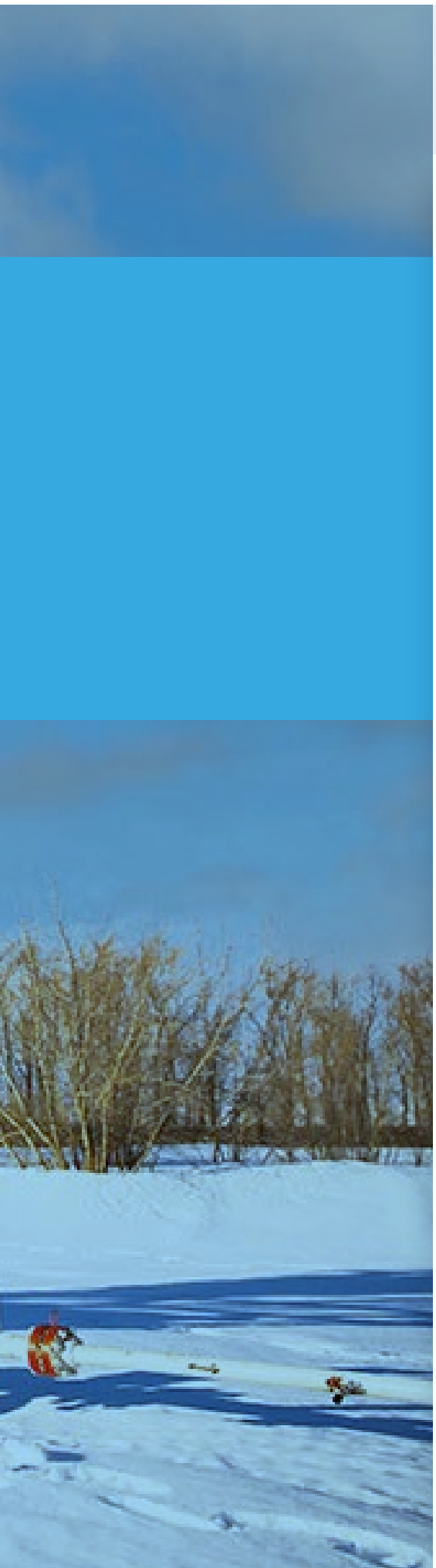
Level Measurement

Tek-Trol's IoT Solution for Level Monitoring can remotely monitor liquid level inside the tank/reservoir in real-time by displaying the readings on a connected dashboard. This solution allows you to access the fluid level information, temperature, and RH on mobile phones and desktops.

The level monitoring system takes care of the industrial process by deploying level metering that lets you keep a live track on parameters like pressure of the fuel, temperature of the pipeline. We can determine accurate results, whenever tanks are empty or hazard conditions in pipelines. In wellhead and pumpjack monitoring, the production management enabled IoT solutions can help reduce lease operating expenses, minimize. unplanned downtime. This ensures safety and regulatory compliance. The data collected is fed into a cloud platform tells the end-user, if more chemical injections are needed or steam into the well, or prerequisite vacuum pressures if required for optimal working condition of the plant.

The tank level monitoring IoT packages are ideal for monitoring remote tanks and water levels. In residential and commercial applications, level monitoring solutions allow estimation of water available on rooftop and overhead tanks. Predictive maintenance and multichannel alerting features of IoT platforms, alerts about increasing or decreasing liquid levels in tanks and can be obtained along with the utilization pattern of liquid stored in the tank.

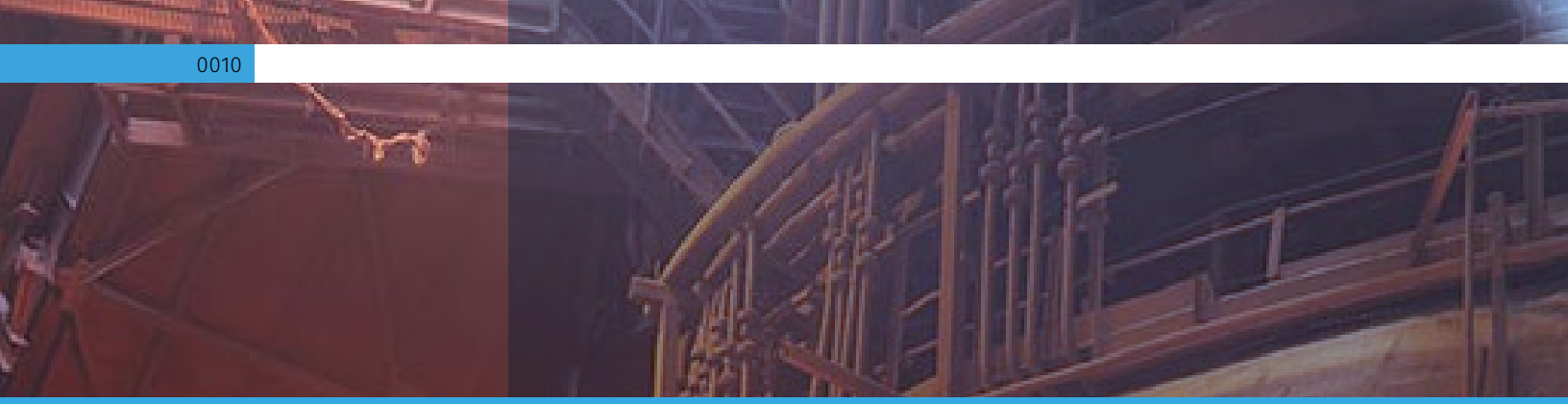


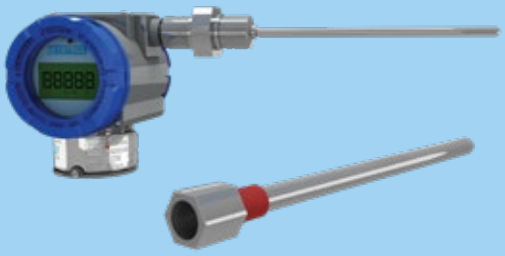


Pressure Measurement

Tek-Trol provides a wide variety of pressure monitoring for industrial applications. The Tek-Trol IoT Pressure monitoring system has the equipment and expertise to monitor your assets properly from water to pipeline pressures. It senses pressure changes in gases and liquids. During the pressure change, the sensor detects these changes and communicates with the connected systems. The faulty scenarios include leak testing, which can be a result of system degradation. Pressure sensors are used in the manufacturing of water systems to detect fluctuations or drops in pressure.

Additionally, Tek-Trol IoT pressure measurements are also used in engine oil pressure monitoring systems in order to monitor the status of a compressor /generator remotely or a fire suppression system.



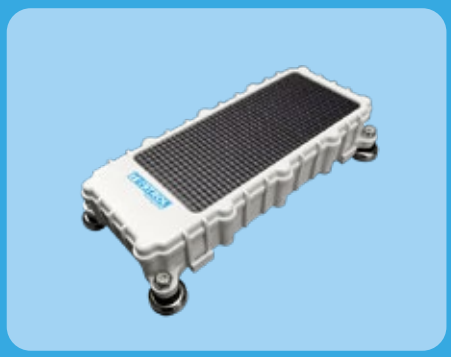


Temperature Measurement

The use of internet enabled temperature sensors with IoT. It facilitated the monitoring of product temperature, which affects the quality of food, pharma and warehousing products. This has empowered the logistics and warehousing operations. This solution, along with IoT, offers temperature monitoring of products.

Benefits of IoT temperature monitoring solution:

- Save time with instant alerts
- Increase Productivity with advanced analytics
- Maintaining regulatory compliance
- Accessibility from remote locations



Nodes

Trending & Data

Tek-Trol collects remote data to provide daily or hourly reports from the node. Our charting system, while feature-rich, is also easy-to-use, allowing clients to review and analyze data with powerful trending features and historical data retrieval.

Alarm Callouts

Data polled from Nodes can provide alarm callouts. The system can be configured to match any alarm conditions and send callouts to you via Voice, SMS, or Email messages to indicate an alarm has been reached at a remote location.

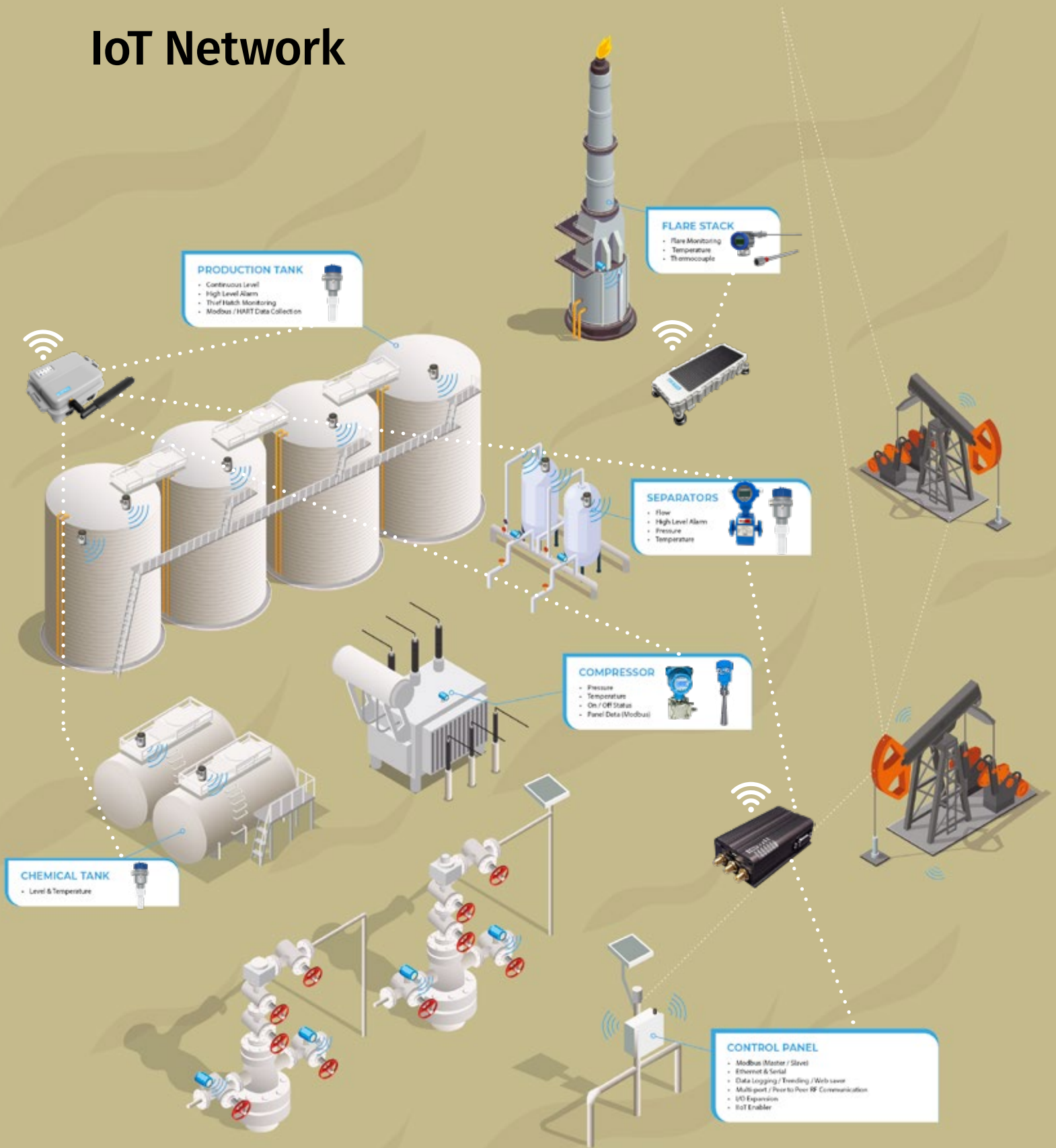
Data Exports

The export function provides clients with a configurable system that can export data to conform to any formats. Tek-Trol can integrate with any third-party systems, with supported data formats including CSV, Excel, Pivot Table, PDF, and more.

Historical Data Archival

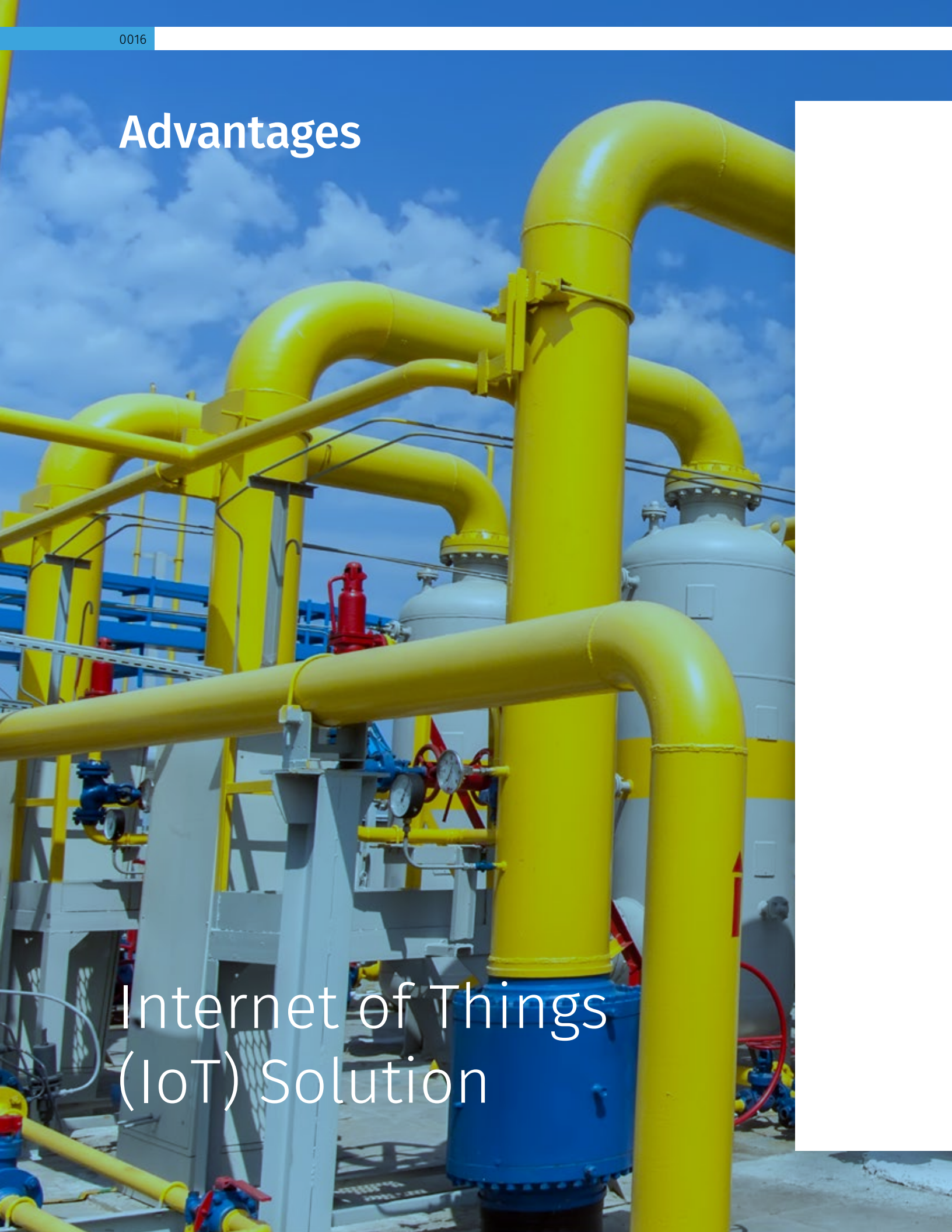
Tek-Trol provides secured cloud-based hosting and data archival functionality, letting you access your data, trends, and reports anytime, anywhere. With secure, redundant servers, and secure remote login, we take care of all the Industrial loT Remote Monitoring details for you.

IoT Network


FLARE STACK
Flare Monitoring
Temperature
Thermocouple
PRODUCTION TANK
Continuous Level
High Level Alarm
Thief Hatch Monitoring
Modbus / HART Data Collection
SEPARATORS
Flow
High Level Alarm
Pressure
Temperature
COMPRESSOR
Pressure
Temperature
On / Off Status
Panel Data (Modbus)
CHEMICAL TANK
Level & Temperature
CONTROL PANEL
Modbus (Master / Slave)
Ethernet & Serial
Data Logging / Trending / Web server
Multi-port / Peer to Peer RF Communication
I/O Expansion
IoT Enabler

Dashboards

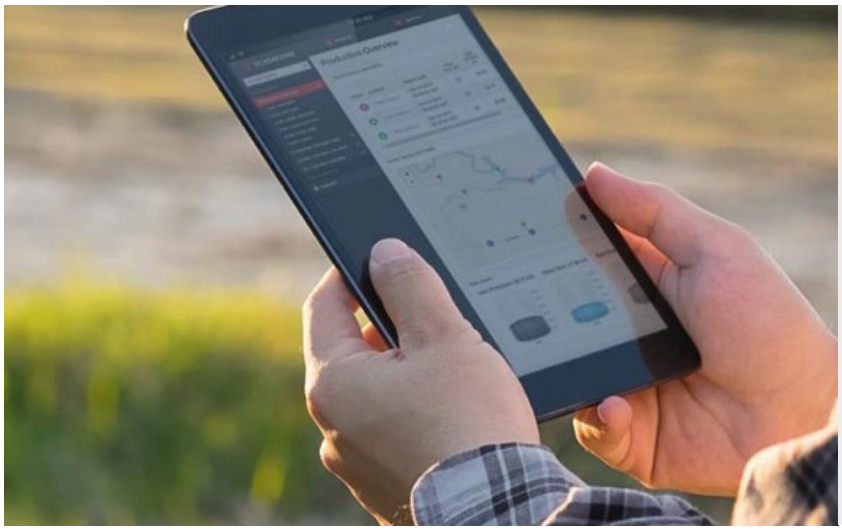
Advantages



Internet of Things (IoT) Solution

Industrial Internet of Things.

-Real-time monitoring and control



Fully Managed and no need for In-House Tek-Trol technicians

- Full-featured remote monitoring at the lowest price point anywhere

Unmatched 24/7 Support from experienced technicians.

- We understand the importance of your data

Dairy

Sugar

Chemical

Mining & Steel

TEKTROL
Technology Solutions

Tek-Trol
IoT Solutions

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