



Artificial Lift **SCADA**

for Oil & Gas Real-Time Operations

Table of Contents

Service description 3

Key benefits 5

Key features 6

Graphic user interface 7

Data analytics 8

ESP analytics 9

Wellmonitor APP 10

Process monitoring 11

Reliable communications 12

Support 13

Global presence 14

Contact information 15

Service Description

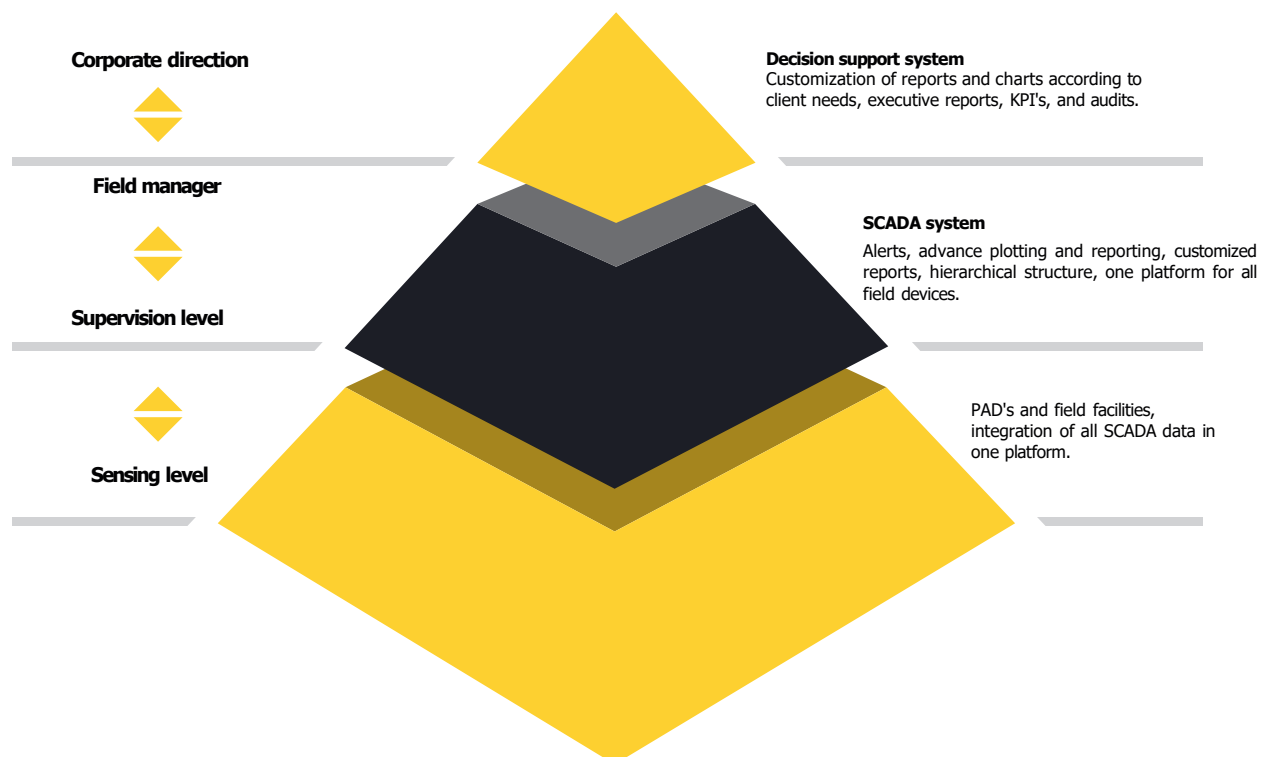
Cloud SCADA for artificial lift systems

WellMonitor is a cloud-based SCADA solution designed for artificial lift systems, including ESP (Electrical Submersible Pumps), PCP (Progressing Cavity Pumps), and SRP (Sucker Rod Pumps). It leverages an Industrial Internet of Things (IIoT) architecture and a fully programmable SCADA terminal, supporting both satellite and cellular communications. This ensures maximum system availability and reliable data transmission, even under severe weather conditions or in remote, challenging environments.



Our services span all levels of the automation pyramid, offering comprehensive solutions tailored to each stage:

- **Sensing and control level:** We provide expert guidance in selecting sensors and controllers, as well as in designing robust field data networks and telecommunications infrastructure.
- **Supervision and control level:** Our solutions include advanced alert systems, automated periodic reporting, historical data analysis, and sophisticated data visualization tools.
- **Management level:** We deliver in-depth statistical analysis, executive-level reporting, key performance indicators (KPIs), system audits, forecasting models, and system customization to meet specific client requirements.





Key Benefits

- **Boost Oil Production**
Enhance operational efficiency through optimized pumping system performance and early detection of opportunities for improvement.
- **Extend Equipment Lifespan**
Protect your investment by reducing wear and tear on well pumps, generators, and other surface equipment.
- **Faster Issue Resolution**
Immediate alerts enable rapid response and resolution of operational issues, minimizing downtime.
- **Save Time for Your Team**
Our customizable reports and analytics automate routine tasks, allowing your staff to focus on higher-value activities.
- **Reduce Operational Costs**
Flexible daily billing means you only pay for the services you use—no unnecessary overhead.
- **No Licensing or IT Hassles**
Delivered via a software-as-a-service (SaaS) model, our platform eliminates the need for complex software installations, licenses, or internal IT infrastructure.
- **Exceptional Customer Support**
Our dedicated team is committed to delivering outstanding service and ensuring your complete satisfaction.

Wellmonitor Key Features

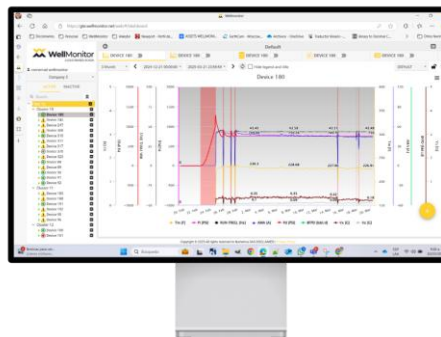
1. **Comprehensive Artificial Lift Support:** Compatible with all artificial lift systems, including ESP (Electrical Submersible Pumps), PCP (Progressing Cavity Pumps), SRP (Sucker Rod Pumps), and others.
2. **Broad Equipment Integration:** Supports electric generators, flowmeters, level sensors, power quality analyzers, and a wide range of industrial instrumentation.
3. **Advanced Data Analytics:** Includes tools for failure prediction, performance monitoring, and production optimization.
4. **User-Friendly Web Interface:** Intuitive and accessible design for seamless operation and monitoring from any location.
5. **Control Capabilities:** Features frequency ramping and PID control for enhanced automation and system tuning.
6. **Real-Time Production Calculations:** Enables accurate measurement of well output and production deferrals.
7. **Intelligent Alerts System:** Monitors key variables and generates alerts upon detecting deviations or abnormal behavior.
8. **Custom Reporting & Charting:** Offers tailored reports and visualizations to meet individual client requirements.
9. **Advanced Visualization Tools:** Includes enhanced plotting options and comparative charts across multiple devices.
10. **Configurable Alert Parameters:** Allows fine-tuning of alert thresholds based on operational needs.
11. **Mobile Accessibility:** Native applications available for smartphones and tablets to ensure on-the-go monitoring.
12. **Geolocation Mapping:** Displays the precise location of monitored equipment on interactive maps.
13. **Custom Map Layers:** Supports overlaying client-relevant data, such as roads, pipelines, and infrastructure.
14. **Unlimited User Access:** No restrictions on the number of users accessing the WellMonitor platform.
15. **Brand Customization:** Fully customizable interface including client logo, color schemes, and domain (e.g., client.wellmonitor.net).

Graphic user interface

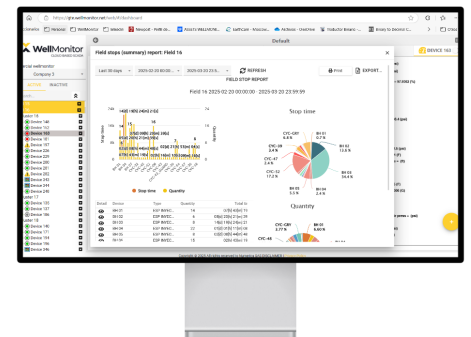
The WellMonitor graphical user interface presents data across various operational environments and can be fully configured by each user to meet their specific informational needs.

At the core of our philosophy is adaptability—WellMonitor is designed to align with the unique requirements of each customer. We offer full customization of the interface, custom report generation, and the ability to develop custom graphics and calculation models, ensuring the platform seamlessly integrates with your operational and analytical goals.

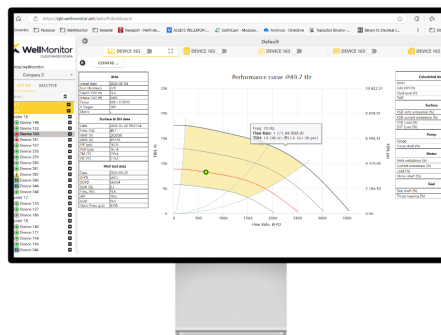
Multi-axis plotting



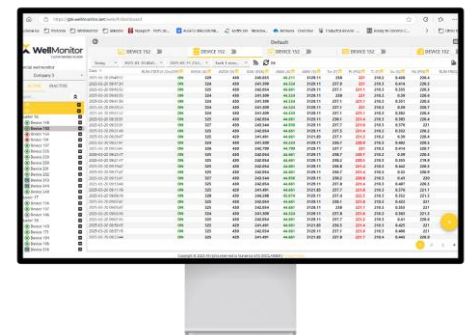
Stops and alerts reporting



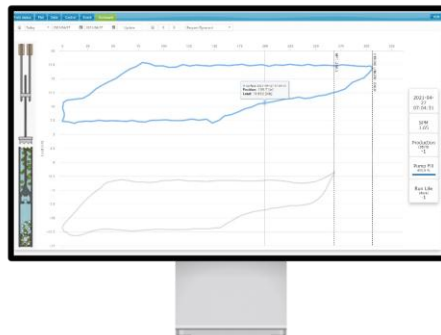
ESP Analysis



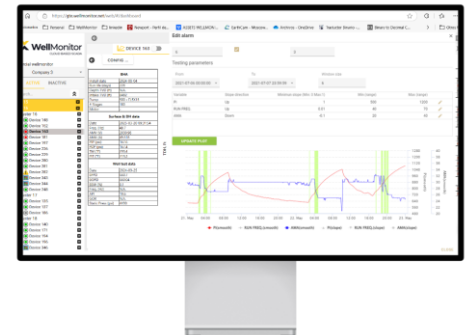
Historic data



Dynacards



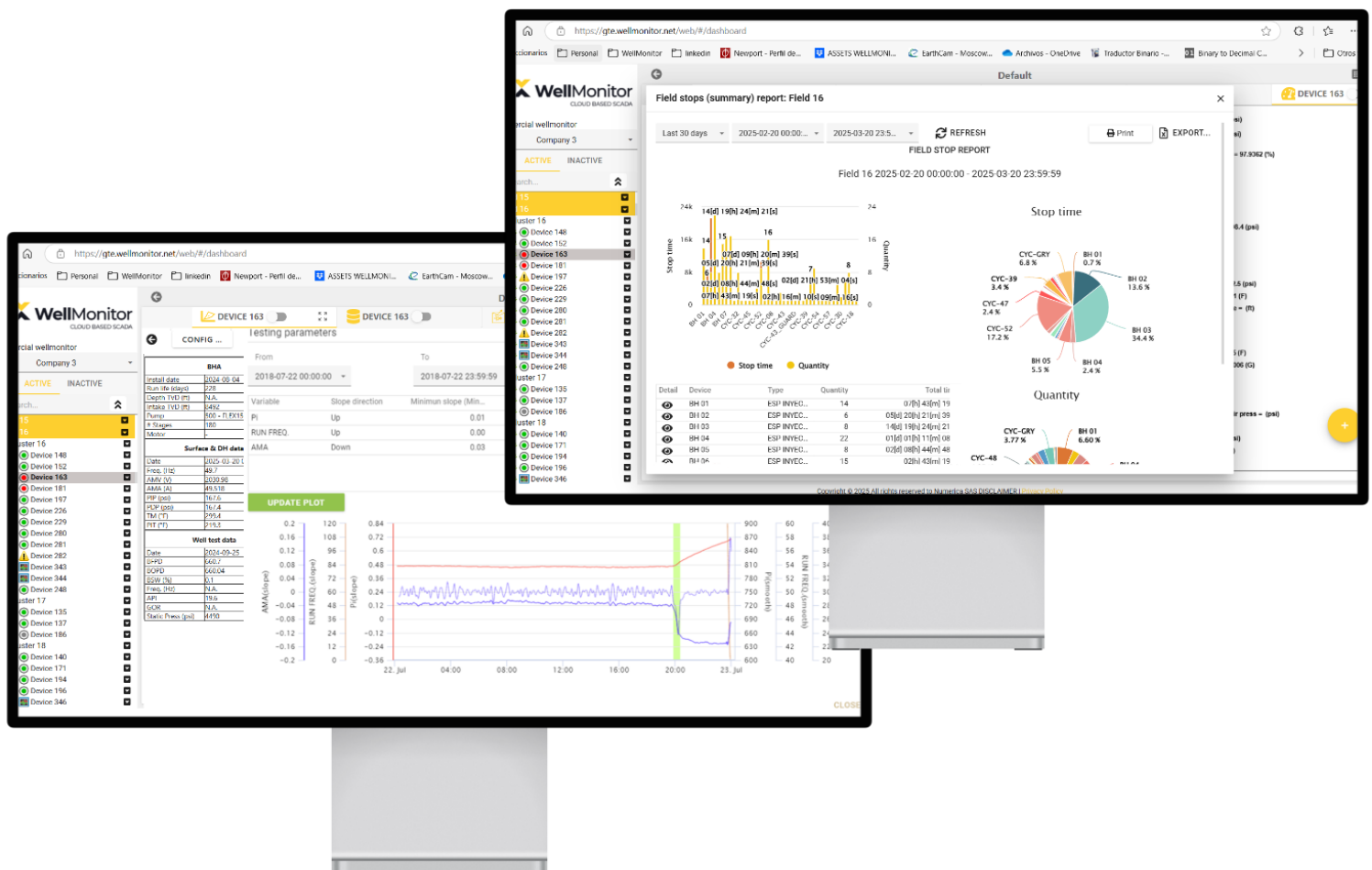
Event detection



Data analytics

Our data analytics tools continuously monitor and analyze real-time data to automatically detect key operational events—such as the presence of gas at the pump intake or broken tubing—providing early alerts to operators so they can take timely remedial actions.

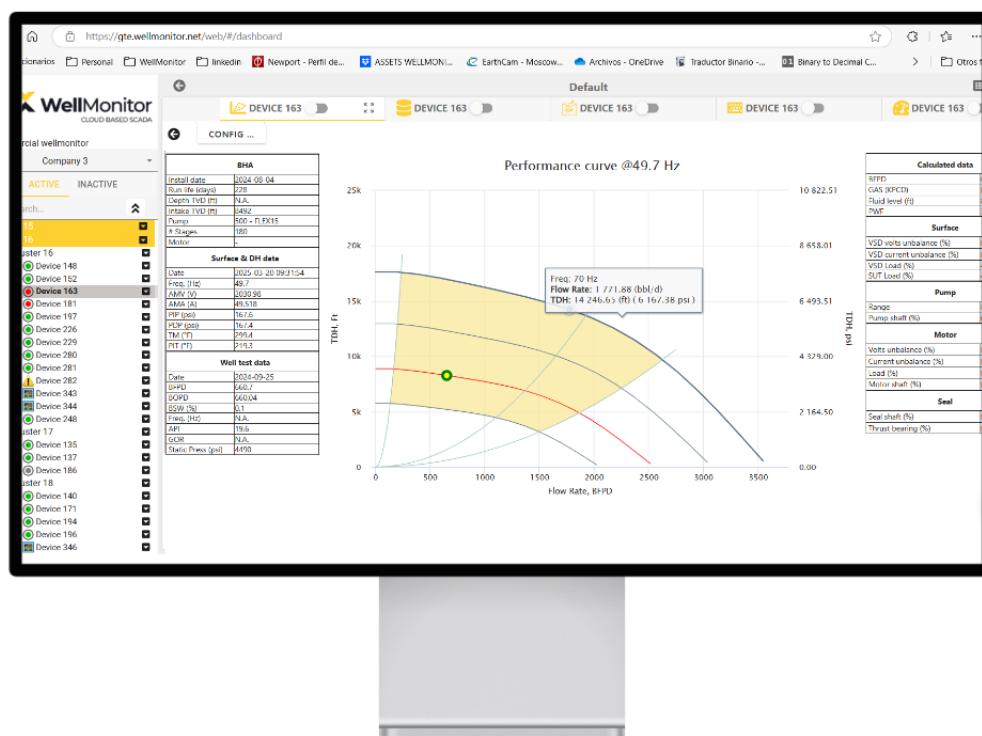
WellMonitor also includes comprehensive tools to analyze well stops and prioritize wells based on stop type, frequency, and duration, helping optimize field operations and maintenance planning.



ESP Analytics

WellMonitor delivers real-time insights into well performance by applying inflow equations to calculate fluid production. Combined with pump catalogue data, the system identifies the pump's operating point and continuously calculates pump submergence—enabling immediate alerts based on critical thresholds.

Beyond flow monitoring, WellMonitor offers comprehensive diagnostics by continuously analyzing mechanical loads on essential ESP components—including the pump, motor, and seal shafts—as well as electrical loads across the motor, VSD, PST, and SUT. This holistic, real-time monitoring empowers operators with actionable intelligence to optimize performance, enhance reliability, and prevent costly failures.



Wellmonitor App

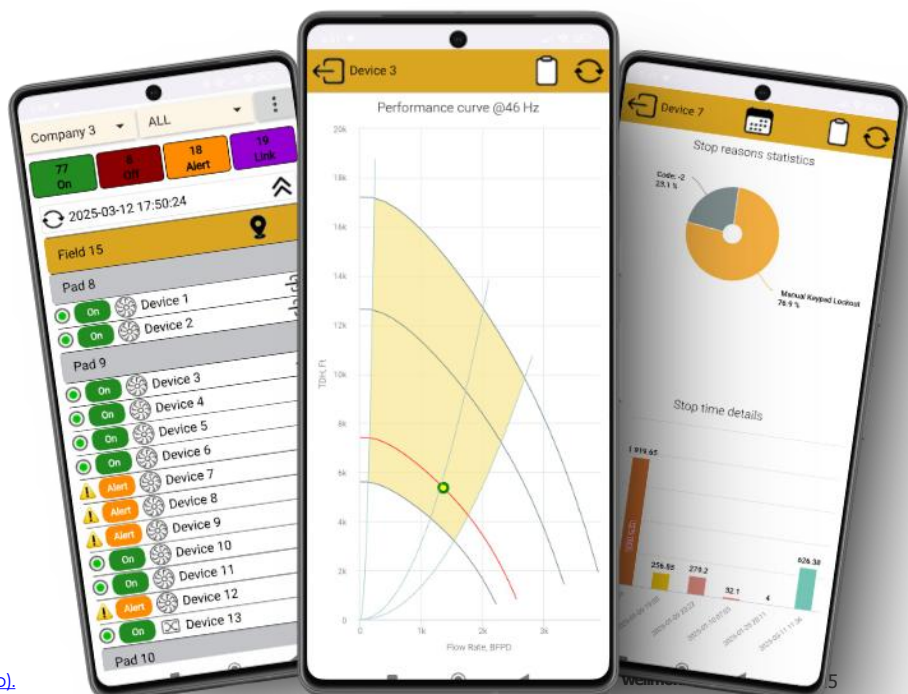
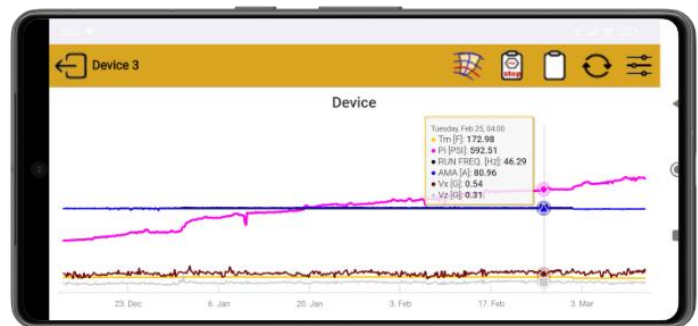
WellMonitor App is a free mobile application available to all registered WellMonitor users. It enables real-time reception and visualization of alerts generated by monitored equipment, with data accessible in both tabular and graphical formats for quick analysis and decision-making.

In addition to remote monitoring, the app supports **manual data entry** from field equipment that is not connected to the system—such as wellhead readings or tank levels. This information is instantly transmitted to the server and seamlessly integrated into the platform, ensuring a unified and up-to-date operational view.

The **WellMonitor App** is available for both Android and iOS devices, providing flexible access to critical data anytime, anywhere.

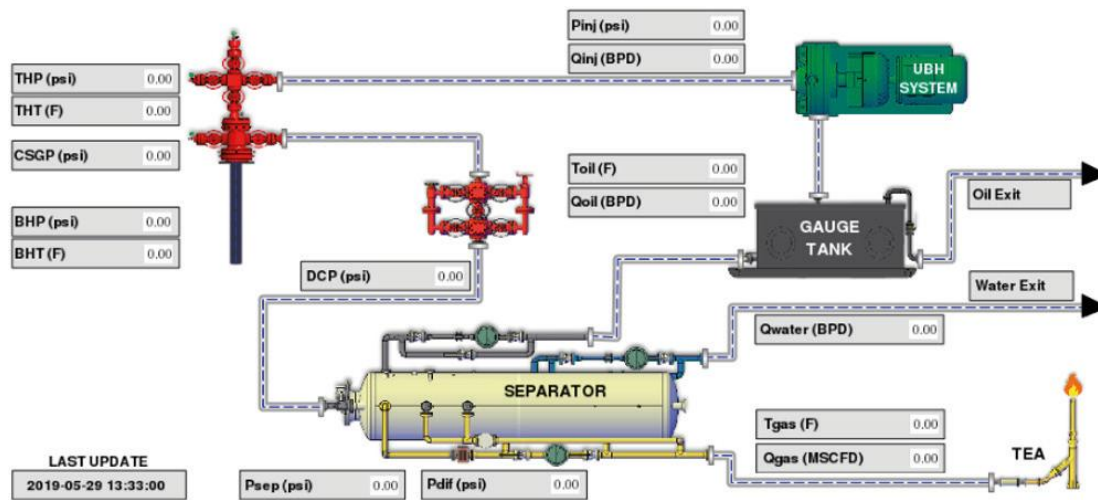
Characteristics:

- Real-time alert monitoring.
- Graphical and tabular data visualization for intuitive analysis.
- Display of pump operational point for performance assessment.
- Generation of stoppage reports and operational analytics.
- Alerts are delivered via sound and/or vibration, appearing in the device's status bar—similar to notifications in messaging apps like WhatsApp.

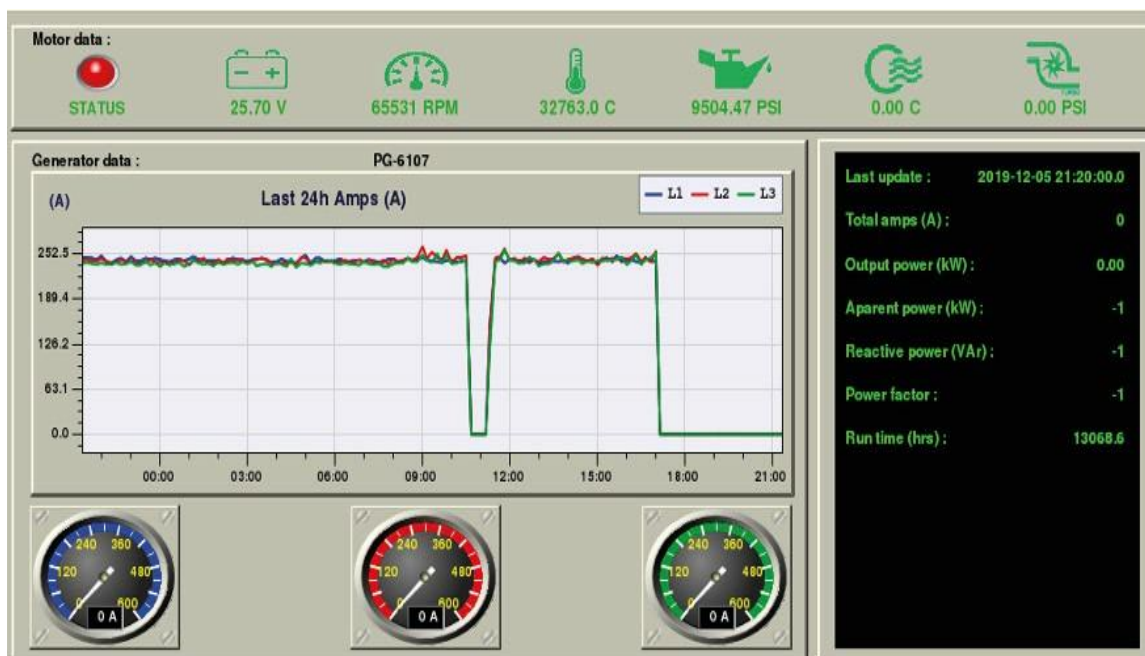


Process Monitoring

From ALS to surface facilities, WellMonitor has been used to monitor and control many kinds of process and devices.



Testing Station



Electric generator control panel (mimic)

Reliable Communications for Maximum System Availability

The telecommunications system plays a critical role in automation, as it directly influences overall system **availability**. WellMonitor ensures continuous monitoring and auditing of the communication infrastructure to maintain optimal performance.

To meet the diverse needs of our customers, WellMonitor offers flexible communication solutions:

1. **Turnkey Communications:** We provide robust Industrial IoT-based satellite or cellular communication systems, specifically designed for SCADA applications.
2. **Integration with Existing Infrastructure:** If a reliable communication system is already in place at the field site, WellMonitor can seamlessly integrate with it to transmit SCADA data to our servers for real-time online access.

Support

At WellMonitor, customer satisfaction is at the heart of everything we do. Our team is fully committed to delivering exceptional service, ensuring that every client receives timely, effective, and personalized support. From implementation to ongoing assistance, we strive to exceed expectations at every stage of the customer journey.

Every member of our team is dedicated to delivering the highest levels of customer satisfaction.

We have successfully supported the implementation of SCADA system projects for ALS and other facilities in countries including Egypt, Libya, South Sudan, Congo, Colombia, Ecuador, and throughout Central America.

Support Features

- **Support Ticket System**
Registered users can access our support ticket system at www.wellmonitor.net. Requests are managed through an organized ticketing platform that allows users to track the status of each inquiry.
- **Comprehensive Training Options**
While WellMonitor is designed to be user-friendly, we offer complimentary online training for all customers. On-site training is also available upon request, provided that the customer covers the travel expenses of our technical staff.
- **Global Live Support**
Our dedicated operators provide real-time online assistance to customers around the world, ensuring prompt and effective support whenever it's needed.

Global Presence and Proven Track Record

Numerica launched this business unit in 2010. Since then, we've expanded our footprint and successfully delivered projects across multiple countries worldwide. The following is a selection of companies that have trusted and continue to rely on our services.





Farid Majana
RTO Services Manager
fmajana@numerica.com.co
Cel. +57 300 385 4126

German Espinosa
Business Manager
gespinosa@numerica.com.co
Cel: +57 310 666 2697

www.wellmonitor.net