

# Advanced SCADA, Historian and HMI Solutions





# Transform Your Power Plants with Our Advanced SCADA & HMI Solution

In the evolving landscape of renewable energy, efficiency, reliability, and compliance with industry standards are critical for maximizing returns on investment. EdgeTunePower (ETP) offers a robust SCADA and HMI platform specifically designed for renewable power plants and battery energy storage systems, adhering to the highest industry standards. Our solution provides real-time monitoring, automated controls, and advanced data visualization to ensure optimal energy production and storage management.

# **Key Features**

### **Key Features of Our SCADA & HMI Platform**

Real-Time Monitoring and Compliance with North American Standards

Monitor energy production, battery charge cycles, and system health with real-time updates while ensuring compliance with industry standards such as NERC Critical Infrastructure Protection (CIP) for cybersecurity and reliability.

• Automated Controls & System Optimization

Control and optimize your plants with event-driven automated controls that maximize efficiency and safety.

· Scalability for Growth

Designed to grow with your operation, our platform supports scalable monitoring and control. Whether managing a small solar farm or a multi-site grid-connected system, our solution adapts easily.





# Why Choose Our Solution?

Complete Visibility into the Power Plant Controller (PPC)

Our Advanced SCADA solution provides block diagrams and parameters of the PPC implemented in the plant, facilitating access to PPC models for future studies and adjustments.

Built-in NERC MOD-25, MOD-26, and MOD-27 Testing

Our SCADA system performs automated NERC MOD tests while ensuring alarms are observed and responded to, enabling remote and efficient testing.

**Comprehensive Cybersecurity Measures** 

Built-in cybersecurity features include encryption, multi-factor authentication, and firewall protections to safeguard against cyber threats in compliance with NERC CIP standards.

Customizable Dashboards

Tailor the interface to specific operational needs using Grafana's advanced dashboarding tools, allowing real-time monitoring and historical data analysis to inform key decisions.

**Data-Driven Decision Making** 

Use historical data and real-time analytics to make informed decisions, including eventtriggered automation for optimizing energy flow based on grid conditions and demand forecasts.

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# Integrating Leading Technologies: GE Cimplicity Empowered by

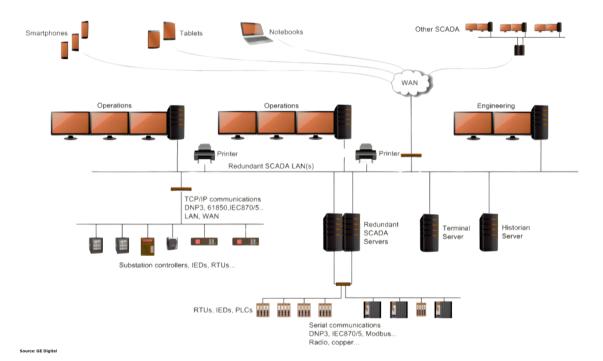


## **Advanced Technology for North American Compliance and Beyond**

Our SCADA and HMI solution is built on powerful, proven technologies that enhance reliability and efficiency. GE Cimplicity and Grafana provide the foundation for real-time control, data visualization, archiving, and compliance with international and North American standards.

### GE Cimplicity

- GE Cimplicity is an industry-leading SCADA/HMI platform designed to meet the operational needs of modern energy systems. With GE Cimplicity, our solution delivers:
  - Real-Time Data Acquisition: Collect and process data from solar inverters, batteries, and sensors in real time using a wide range of industrial communication protocols.
  - Event-Driven Automation: Instantly respond to system events and alarms using the event-driven architecture of GE Cimplicity, enabling rapid adjustments for optimal performance.
  - Advanced Alarm Management: Stay ahead of potential issues with customizable alarm notifications that integrate seamlessly into your operational workflow.



Mobile Utility Control Room Substation server/ HMI Substation Controlle WAN Substation LAN IFDs

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# **Integrating Leading Technologies:** Grafana

- Customizable Dashboards: Grafana offers tailored, interactive dashboards for real-time and historical data visualization.
- Multi-source Data Integration: Telegraf collects data from various sources, which Grafana displays for centralized monitoring.
- Real-Time Monitoring: InfluxDB enables efficient real-time data updates for improved decision-making.
- Advanced Alerting: Set customizable alerts in Grafana for proactive system management.
- Historical Data Analysis: InfluxDB stores long-term data for detailed analysis, with Grafana visualizing trends.
- Lightweight Data Collection: Telegraf efficiently collects and sends data to InfluxDB, ensuring low-latency monitoring.
- Scalable and Extensible: Grafana, InfluxDB, and Telegraf are open-source and scalable, growing with operational needs.









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