AVICORE TECHNOLOGY

GRID AND ENERGY APPLICATIONS

aviCore is a modern, secure platform for real-time industrial data, offering integrated analytics, visualization, and reporting through a unified, hierarchical architecture. Unlike legacy SCADA systems, it's designed from the ground up to address today's cybersecurity, interoperability, and data modeling needs.



Avista Realtime Systems, LLC avistarts.com info@avistarealtime.com 410 205 2484 7389 Washington Blvd #108 Elkridge, MD 21075



aviCore | Intelligent Monitoring for Distributed Energy Systems

aviCore™ is a modern, secure, and flexible platform built to monitor, control, and optimize today's distributed energy assets—including battery storage, solar PV, switchgear, EV charging infrastructure, and more. Designed for industrial resilience and real-time visibility, aviCore empowers utilities, facility managers, and microgrid operators to drive performance and reliability across a range of critical infrastructure.



Built for Modern Energy Networks

aviCore enables seamless integration and monitoring of diverse distributed energy assets across municipal, commercial, and industrial applications:

- Battery Energy Storage Systems (BESS)
- Solar & Renewable Generation
- Switchgear and Power Distribution
- EV Fleet Charging Infrastructure
- · Municipal and Rural Electric Systems
- · Commercial & Institutional Buildings

Whether you're managing a behind-the-meter microgrid or utility-scale DERs, aviCore delivers the tools you need to stay connected and in control.



Key Capabilities

✓ Real-Time Monitoring & Dashboards

Visualize system health, energy flow, alarms, and KPIs from one unified interface.

✓ Edge Intelligence

Deploy field-ready edge devices for secure, high-speed data acquisition, control, and protocol conversion.

✓ Data Integration & Open APIs

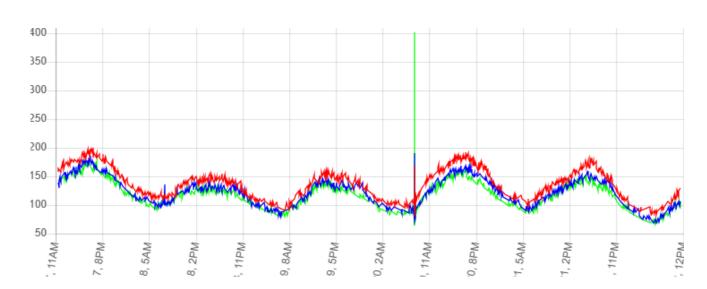
Connect with SCADA, building systems, and third-party platforms via open APIs and protocols (Modbus, DNP3, IEC 61850, MQTT).

✓ Event & Alarm Management

Get alerted to abnormal conditions instantly, with customizable thresholds and escalation paths.

Advanced Analytics

Gain insights into performance, utilization, trends, and energy optimization opportunities.



Proven Benefits

- Reduce Downtime through early detection and proactive alerting
- Cut Operating Costs by optimizing load and asset performance
- · Lower Emissions via energy mix balancing and demand response
- · Boost Reliability with real-time visibility and system-wide intelligence

Flexible Deployment

aviCore can be deployed on-premises for full ownership and security, or as a SaaS model where our team manages infrastructure, updates, and cybersecurity. A hybrid model is also available for mission-critical systems requiring local control with cloud-based visibility.





aviCore Edge Engine

aviCore Engine is a flexible, hardware-independent edge software platform for real-time monitoring, control, and analytics. It runs on industrial hardware like Emerson PACSystems, Phoenix Contact PLCnext, and other Linux/Docker-enabled devices, enabling:

- Protocol support: Modbus, DNP3, IEC 61850, MQTT
- · Secure communication: TLS, VPN, certificates
- CODESYS Soft PLC for local control
- Deploy anywhere: Servers, PLCs and devices
- With built-in 4G/5G and satellite IoT support
- · Edge buffering, event logic, and alarm management









Start Building with aviCore

Whether you're modernizing existing infrastructure or deploying a new distributed energy system, aviCore gives you the flexibility, visibility, and control to succeed. Contact us today to schedule a demo, explore integration options, or learn how aviCore can accelerate your digital transformation. Let's build smarter, more resilient systems—together.