



BROCHURE

Octave Tempo Control System Effectiveness

A comprehensive solution for improved
operator situation awareness and operational
risk management





Every industrial facility centers on three priorities: safety, the environment and cost. Risks to these areas are inherent to operations, making the ability to measure and manage them essential for long-term sustainability.

Challenges

- Poorly performing alarm systems, plagued by alarm floods, inaccurate alarms and suppressed alarms diminish situation awareness and negatively affect plant production and safety.
- Monitoring, identifying, assessing and addressing bad actor control loops from thousands of loops is a complicated and time-consuming process.
- Plant personnel lack clear visibility into boundaries and alarms designed to ensure compliance with production and safe operating limits.
- Operations managers often can't access the reliable data they need to make informed decisions because systems and spreadsheets keep information siloed.
- Proportional-integral-derivative (PID) controllers do not function at an acceptable or optimal level because of instrument issues or a lack of proper tuning that can lead to system instability and abnormal safety situations.

Solutions

Achieving operational excellence requires a holistic approach that connects and transforms all aspects of operations. Octave provides data insights and actionable information to plant personnel. This enhances operator situation awareness and mitigates abnormal situations, improving overall plant safety, reliability and profitability.

Octave Tempo Control System Effectiveness (formerly PAS PlantState Integrity) a comprehensive platform of solutions, provides a critical view of the performance of alarm systems, control loops, operational boundaries and independent protection layers (IPLs). The solutions draw from multiple data sources, contextualize that information and convert it into clear, real-time insights that support better decision making across the plant.

- **Tempo Alarm Management** (formerly PAS AlarmManagement) reduces nuisance alarms, facilitates regulatory compliance, avoids upset conditions that affect production and improves operator detection and response to abnormal situations.
- **Tempo Boundary Analytics** (formerly PAS InBound) aggregates, validates and displays safe operating limits in real-time, presents safe operating limits in context within control display systems and allows operators to instantly determine a plant's current state relative to its safe operating limits.
- **Tempo Safety System Performance** (formerly PAS IPL Assurance) optimizes plant resources by automating IPL integrity reporting, facilitates the lifecycle support of all safety infrastructure within a facility and provides an audit trail for IEC and OSHA compliance.
- **Tempo Control Loop Performance** (formerly PAS ControlWizard) monitors control loops to diagnose and expose potential issues with sensors, valves and controllers so they can be addressed before safety risks occur and profitability is affected.
- **Tempo Control Loop Tuning** (formerly PAS TuneWizard) develops effective tuning parameters to ensure optimal and robust control loop performance.



Benefits

- Reduce nuisance alarms by up to 70% with bad actor identification and resolution.
- Identify and flag potential violations that could cause delays, lost production and unnecessary shutdowns.
- Decrease the number of loops in manual by more than 50%, improving control loop performance and process efficiency.
- Increase uptime and throughput with better abnormal situation management and communication.
- Standardize bypass governance and reduce safety instrumented function (SIF) bypasses by up to 90%.
- Achieve up to 60% alarm rate improvement by adjusting setpoints, deadbands and delay times.

Understanding the relationships between alarm management, control loops, boundary management and IPLs is critical to understanding and improving operational performance.

Operational oversight starts with trusted data. When data is contextualized and visualized, it exposes hidden risks and drives smarter, safer decisions across operations.

With Tempo Control System Effectiveness, insight becomes advantage. Strengthen your operational core, enhance safety and control and achieve greater resilience across every process.



About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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