



Intelligent Data Center Energy Management

OVATION™


EMERSON

Intelligent Energy Management for Data Centers

Reliable, Integrated Power Generation and Microgrid Control for Data Center Complexes

Purpose-built to meet the availability and load demands of modern data centers, Emerson's Ovation™ Automation Platform delivers low-risk, unified technologies that go beyond traditional distributed control. Embedded AI-driven automation, advanced applications, simulation, and layered cybersecurity—supported by comprehensive lifecycle programs—enable optimized energy generation, distribution, and consumption across your entire operation.

Balancing Power Generation with Load Demand Through Proven Strategies

The Ovation Automation Platform helps data center owners and operators meet stringent availability requirements, intelligently balance load demands with generated power and elevate operational performance. The Ovation platform incorporates AI-enabled automation and integrated, software-defined control to deliver greater efficiency, reliability, and scalability.

Industry-Leading Platform with Field-Proven Applications to Help Achieve 99.99% Reliability



Predictive Maintenance & Forecasting

Empower your workforce and optimize operations with predictive and prescriptive insights.



Electrical Control

Safe, reliable control of switchgear, motors, breakers, and circuits, with integrated monitoring of protection relays and power meter.



Energy Management

Maintain power and frequency on highly variable loads with balanced, power generation, energy storage, and power distribution.



Microgrid Control

Coordinates and optimizes generation amongst solar, wind, gas and BESS assets coupled with responsive load shedding.



Supervisory Control

Unified control, monitoring, and sequencing of individual systems and processes across the power island, microgrid and data center complex.



Cybersecurity

Strengthen your security posture by implementing certified, qualified anti-terrorism technology using a defense-in-depth approach.

Advantages at a Glance

Intelligently Balance Energy Demand with Purpose-Built, Proven Strategies

Designed specifically for the power industry, the Ovation energy management system balances data center load demands with microgrid energy supply to help ensure optimal generation and continuous data center availability. It automates microgrid and macrogrid control to provide stable, low-carbon energy supply—even during grid disturbances.



Future-Proof Your Data Center with Emerson's Trusted Automation Expertise

Emerson partners with global power producers to help meet aggressive data center schedules through innovative, forward-thinking automation solutions. Our Ovation Automation Platform integrates cutting-edge technologies to deliver intelligent, resilient, and scalable energy management—built to meet your needs today and well into the future.



Emerson: Your Trusted Advisor for End-to-End Data Center Automation

A Global Industrial Technology Leader with Deep Industry Expertise and a Legacy of Innovation



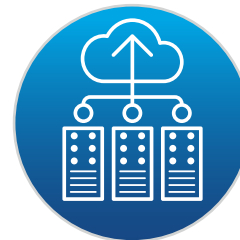
Construction

Build with speed and reliability with proven automation solutions that help meet aggressive timelines, unify data and evolve overtime



Operation

Maintain reliable power generation operations to achieve high availability and energy efficiency with fault-tolerant, redundant and intelligent control strategies



Expansion

Confidently scale smarter with future-ready, repeatable, integrated, advanced automation strategies that eliminates complexity and reduces costs



Maintenance

Future-proof automation with expert support, timely service and predictive maintenance to maintain peak performance.

Global Power Automation Market Leader With 50+ Years Of Experience

Intelligent Automation for Critical Data Center Power Operations

Reliable

Unrivaled, fault-tolerant, integrated tech stack that keeps pace with changes in disciplined, balanced manner

Proven

Thousands of installations world-wide for various applications, generating units and fuel types

Secure

Secure-by-design with purpose-built features leveraging proven methodologies and a risk-based defense-in-depth approach

Quality

Full-scope project management and engineering by expert teams, along with rigorous quality procedures to ensure successful implementation

Innovative

Emerson's cutting-edge technologies empower global companies to unlock peak performance and drive innovation

Experience

Emerson combines proven technologies, deep domain expertise, and structured processes to help you operate safely, improve reliability, and continuously optimize performance—backed by global support and lifecycle services.



Boundless Automation

Reliable, cohesive, integrated, redundant architecture that removes data siloes across the facility from generation to data center for broad interoperability

Scalable Architecture

Easily scale from a single asset or microgrid to multiple energy sources across the data center infrastructure to keep pace with growth

Seamless Integration

A comprehensive suite of protocols seamlessly communicate to a wide-array of devices and systems, aggregating data for a single view of all operations

AI-Enabled

Optimize operations and support resilient infrastructures with the first Gen-AI-enabled automation platform for power and water industries

Certified Cybersecurity

Designated and certified by DHS as qualified anti-terrorism technology to help protect your assets against threats and strengthen security posture



Comprehensive Support

Customized end-to-end lifecycle management programs protect against obsolescence to mitigate risk and ensure consistent, reliable operations

**Discover how Emerson's
team of power and
automation experts can
help accelerate your
data center journey.**

Scan now to contact us.



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