# Intelligent Data Centers for the AI Era

HIVEMQ

### The AI Imperative for Change

Traditional monitoring was built for predictable IT environments, but AI workloads are pushing data centers to their limits as rack densities surge, demand becomes volatile, and SLAs come under pressure. Legacy systems deliver dashboards but not decisions, leaving EPMS, BMS, DCIM, and environmental data trapped in silos. HiveMQ unifies this telemetry into trusted, real-time intelligence that addresses the core challenges.

Operational complexity is reduced as cooling, power, and compute data is no longer siloed, enabling fast, coordinated response. Real-time telemetry adapts to unpredictable demands beyond static planning. Blind spots are eliminated as high-density racks gain continuous power and thermal visibility to prevent failures. Limited visibility is replaced with decision-ready intelligence so operators can act instantly.

## With HiveMQ, Customers Achieve

**25%**
### Greater Operational Efficiency
Cut energy waste and maximize resource utilization.

**30%**
### Reduction in Unplanned Downtime
Predictive insights that guarantee SLA performance.

**99.999%**
### Reliability of Systems
Trusted enterprise operations with no message loss and proven resilience.

## The HiveMQ Advantage for AI-Ready Data Centers

HiveMQ provides an enterprise-grade platform that transforms siloed telemetry into real-time, decision-ready intelligence. Four core capabilities set HiveMQ apart:

### Enterprise Data Streaming
Secure, high-fidelity MQTT and Sparkplug streaming ensures accurate, real-time telemetry trusted for compliance and decisions.

### Scalable and Resilient
Distributed architecture powers millions of connections, accelerating onboarding and delivering proven enterprise-grade reliability.

### Real-Time Intelligence
HiveMQ structures telemetry into actionable insights, enabling predictive analytics, orchestration, and rapid operator response.

### Future-Proof for AI
Structured, context-rich telemetry fuels advanced analytics, optimization, and AI-driven services across modern infrastructure.

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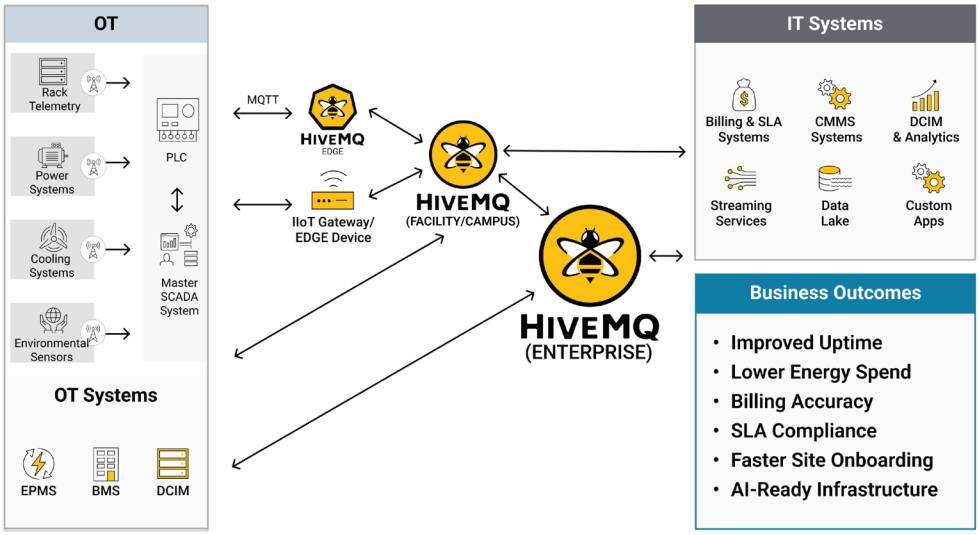
## HiveMQ Platform for AI-Ready Data Centers

AI workloads, rising rack densities, and strict SLA requirements demand real-time visibility across power, cooling, and workloads. HiveMQ unifies telemetry from EPMS, BMS, DCIM, and environmental sensors into a trusted data backbone that feeds IT and AI systems. This enables operators to cut energy costs, improve uptime, and deliver AI-ready infrastructure.




### Thermal & Power Optimization

Continuously stream high-density rack and power telemetry to prevent hotspots and energy waste.

### Predictive Maintenance

Detect anomalies early across cooling systems, UPS systems, and generators to minimize downtime and service disruptions.

### Billing & SLA Compliance

Deliver accurate, auditable data for transparent billing, SLA reporting, and regulatory assurance.

Learn more

> “Demand for AI-ready data center capacity will rise 33 percent a year. Around 70 percent of total demand for data center capacity will be for data centers equipped to host advanced-AI workloads by 2030.”
>
> **McKinsey & Company**

## Technical Benefits

### Business Critical Reliability

- Zero message loss with clustering and persistence
- Fault-tolerant, highly available architecture with rolling upgrades

### Scalability to Support Growth

- Elastic clustering scales facilities, campuses and regions
- Proven for millions of connections and billions of messages

### Maximum Interoperability

- Runs anywhere: edge, on-prem, hybrid, or cloud
- Bridges OT protocols with IT, AI, and analytics platforms

Learn more at **www.hivemq.com/solutions/data-center-monitoring** →