



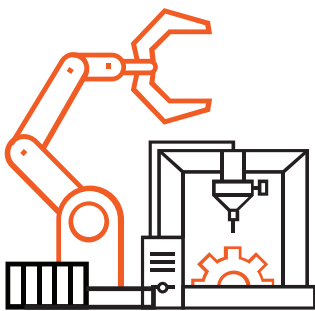
Brochure

Vertiv in Manufacturing

Providing Unmatched Protection and Reliability for Critical Equipment



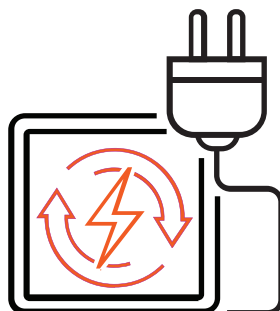
Manufacturing in the Age of AI



AI Factories & Autonomous Manufacturing

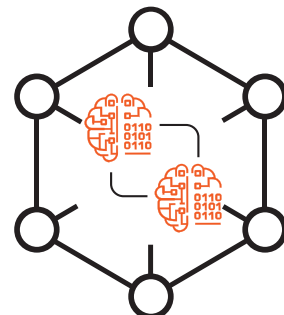
- Manufacturers are moving beyond AI pilots and deploying AI across production, quality control, robotics, and plant operations to improve efficiency, throughput, and decision-making.
- AI-powered factories require highly resilient power, cooling, and edge infrastructure to support real-time data processing and always-on operations.
- As AI workloads expand from the data center to the factory floor, manufacturers are increasingly investing in local compute environments and industrial edge infrastructure.
- 68% of industrial manufacturers expect to be deploying AI at scale within the next 12 months, while 49% are already realizing business value from active AI use cases.

(Source: KPMG Global Tech Report 2026)



Energy-Resilient Manufacturing Operations

- Manufacturers are treating energy as a strategic production resource, driven by electrification, automation, AI adoption, and sustainability targets.
- Reliable power has become essential for preventing costly disruptions in highly automated production environments, from semiconductor fabrication to battery manufacturing.
- Companies are investing in energy-efficient infrastructure, power protection, energy storage, and smart facility management to improve operational resilience and reduce risk.



Connected Edge Manufacturing & Digital Twins

- Manufacturers are connecting production assets, sensors, robotics, and operational systems to create real-time visibility across the factory.
- Digital twins and edge computing allow manufacturers to simulate, monitor, and optimize operations while reducing downtime and improving performance.
- Real-time processing at the edge is becoming critical as manufacturers deploy AI-driven applications that require immediate response and low-latency decision making.
- Global spending on edge computing is expected to reach US\$261 billion in 2025 and grow to nearly US\$380 billion by 2028, with Manufacturing & Resources representing approximately 25% of total spending.

(Source: IDC)

INFRASTRUCTURE CHALLENGES



Protecting Critical Manufacturing Equipment

- As manufacturers deploy AI, automation, robotics, and advanced production systems, even brief power disturbances can result in unplanned downtime, product defects, and lost productivity.
- Protecting critical manufacturing equipment requires a systems-level approach that considers the entire power chain, from utility connection and energy storage to power distribution and equipment protection.
- As manufacturing facilities become increasingly digitalized, ensuring reliable power, thermal management, and monitoring is essential to maintaining operational continuity and production quality.
- Manufacturers are investing in resilient infrastructure to support greater automation, higher equipment utilization, and the growing compute demands of modern manufacturing environments.



Managing Critical IT infrastructure at the Edge

- Manufacturers are increasingly deploying AI-powered quality inspection, robotics, machine vision, and operational analytics directly on the factory floor, creating demand for localized compute infrastructure.
- Edge environments require integrated power, cooling, monitoring, and management systems capable of supporting real-time decision-making and low-latency applications.
- A systems-level approach helps manufacturers optimize the interaction between operational technology (OT), IT systems, edge computing, and production assets.
- Ensuring high availability at the edge is critical as AI workloads expand beyond centralized data centers into manufacturing facilities.



Protecting the IT Backbone

- Modern manufacturing depends on an interconnected ecosystem of applications, industrial networks, edge infrastructure, data centers, and cloud platforms.
- The rapid adoption of AI, digital twins, industrial IoT, and advanced analytics is increasing compute density and infrastructure requirements throughout manufacturing operations.
- Manufacturers need scalable power, cooling, and monitoring technologies that support both current operations and future AI-driven growth.
- End-to-end visibility and lifecycle services help ensure critical systems remain available while supporting evolving business and production requirements.



Real-Time Information for Real-Time Response

- Manufacturers are increasingly leveraging AI, connected sensors, and digital twins to gain real-time visibility across production lines, facilities, and supply chains.
- Access to real-time operational data enables faster responses to equipment issues, production bottlenecks, and changing business requirements before they impact output.
- Advanced monitoring and analytics solutions help manufacturers improve asset performance, optimize maintenance strategies, and reduce operational risk.
- A systems-level infrastructure strategy ensures data can be collected, processed, and acted upon from the factory floor to the edge and enterprise.
- Integrating power, thermal, and digital infrastructure creates a foundation for AI-enabled operations and smarter manufacturing outcomes.



VERTIV SOLUTIONS

Customized industrial UPS solutions, engineered to meet your needs



Vertiv™ Liebert® APM2
The Compact Row-Based UPS
with FlexPower Technology™



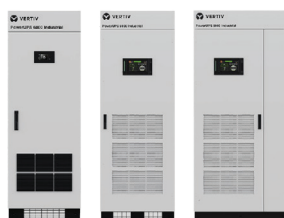
Vertiv™ Liebert® EXM
Efficient and Flexible Power-Optimized
For Medium-Size UPS Applications



Vertiv™ Liebert® Hipulse U
Utmost Reliable Power Solution
for Critical Business Applications



Vertiv™ Liebert® ITA2 (5-40kVA)
Compact, Efficient & Robust UPS
For Critical Applications



**Vertiv™ PowerUPS 6000
Industrial (6-200kVA)**
Unwavering Power for
Demanding Environments



Vertiv™ PowerUPS 9000
High performance, modularity,
resilience, reliability and efficiency
for your power needs.



Vertiv™ Liebert® CRV4
4th Generation Row-Cooling
with Elevated Performance



Vertiv™ Liebert® DM
High-performance cooling applications for
small computer rooms and network closets



Vertiv™ Avocent® HMx
Providing seamless access to
multiple computing resources



Vertiv™ Smart Infrashight™
Consolidated On-Premise
Monitoring Solution



Vertiv™ PowerIT
Reliable power distribution helps manage
power capacity and increase functionality



Vertiv™ SmartAisle™ 2

- Pre-configured, rapidly deployable integrated IT infrastructure for core deployments
- Replaces traditional bricks-and-mortar design with flexible, efficient solutions



Vertiv™ SmartAisle™ 3

- Latest-generation SmartAisle with high-efficiency cooling, UPS, and flexible busbar power distribution
- AI-enabled with self-learning capabilities and automatic energy optimization



Vertiv™ SmartRow™ 2

- Rapidly deployable IT infrastructure for core or branch deployments
- Integrated with full suite of power, cooling and monitoring solutions for maximum efficiency and availability
- Expandable and flexible depending on IT requirements



Vertiv™ SmartCabinet™ Premium

- Integrated, pre-configured infrastructure that brings "plug-and-play" convenience to small spaces and edge locations
- Offers high efficiency and availability with the Liebert ITA2 UPS and integrated Thermal Management solution
- Comes with intelligent monitoring capabilities through the Liebert RDU software

Global Service

A complete life-cycle approach to service, from project launch to ongoing maintenance and performance optimization



Services ensure that your vital applications stay up and running. We do this through our vast array of project, maintenance and performance capabilities, supporting you in making better decisions to operate more efficiently and reduce complexity.



**Truly Global
Geographical Coverage
and Capacity**
Largest Customers Engineers
workforce



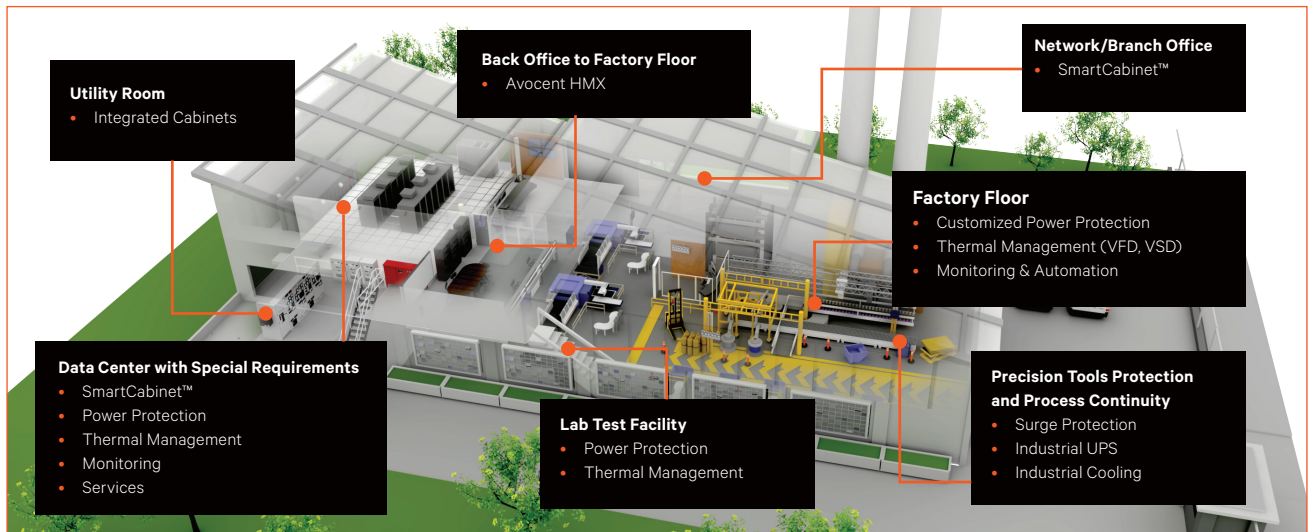
**Knowledge, Reputation
and Experience**
Technology, R&D access,
Field knowledge



**Consistent Service Delivery
and Offering**
Offering diversity, Breadth
of technologies



**Single Service Partner and
System Level Expert**
Reliability – we are the trusted
partner



Global Automotive Manufacturer



Overview

As part of its modernization efforts and to improve business processes, the customer set out to build a new office server room to handle business demands. The customer was looking for an innovative solution that would allow them to be ahead of the competition, while addressing their IT and infrastructure demands. Vertiv's SmartRow™ solution was deemed the best fit for the customer's new server room compared to a conventional infrastructure build with its integrated solution combining power, thermal and infrastructure management.

Vertiv Solution

- SmartRow™
- Liebert® UPS
- Liebert® Thermal Management

Global Technology Firm



Overview

The customer underwent a major data center reorganization in 2015. The relocation of its IT equipment offshore presented significant challenges to the existing power and thermal infrastructure supporting the new reduced IT load in their Sydney data center. One of the challenges facing the firm was to determine the inefficiencies caused by relocation of its IT assets. At the same time, it wanted to reassess the capabilities of its three 63KW CRAC (computer room air conditioning) units that were approaching end of life. By applying Vertiv's eCap™ Energy Optimization Service, the customer was able to reduce total data center energy consumption by as much as 33%.

Vertiv Solution

- Vertiv™ EnerSav

PHILIPPINE-BASED SEMICONDUCTOR FIRM



Overview

To support its growing business, the customer set out to expand its regional manufacturing site. In its expansion, the customer needed reliable equipment, support and services to support its new facility, which will be used for assembling and testing chips for computers, aerospace, telecommunications and automotive industries. Vertiv's UPS, battery monitoring solutions and 24x7 services helped the customer in its facility upgrade, providing the reliability and availability it needed.

Vertiv Solution

- Liebert® UPS
- Liebert® Thermal Management 60TR single unit
- Maintenance Services
- Battery Monitoring

JAPANESE ELECTRONICS MANUFACTURER



Overview

The customer's legacy data center needed an upgrade as it was facing efficiency issues, making it prone to downtime. The customer approached Vertiv for a solution to support a conventional data center setup, but able to accommodate demands of flexibility and scalability. The Vertiv SmartRow's rapid deployment and space-saving design allowed the customer to quickly set up a new data center with limited to no downtime at all.

Vertiv Solution

- SmartRow™ 4+1

Remote & Site Monitoring Services

System-wide monitoring solutions

- 24 hour help desk support by expert engineers
- Remote preventive maintenance for proactive identification of anomalies
- Remote battery testing
- Alarm management
- Field incident resolution
- Equipment optimization advice
- 24/7 customer access via internet
- Third party equipment integration
- Customized reports
- Integration with high level platforms via SNMP

LIFE™ Remote Monitoring & Diagnostics

Maximized system availability via real-time diagnosis and resolution of operating anomalies

- 24 hour monitoring and service delivery by expert engineers
- Monitoring and trending of system data
- Diagnosis through expert data analysis allowing effective proactive maintenance and prevention of future anomalies
- Prompt alarm identification and resolution
- Alarm notification
- On-site corrective maintenance dispatching
- Third party equipment integration
- Customer reporting

Vertiv Data Center Optimization Services

Complete infrastructure audits maximize system availability and enhance data center efficiency

- Airflow, heat and power assessments
- Temperature measurements
- Floor plan layout
- Reporting
- Recommendation
- EC fans enhance energy savings on installed equipment
- iCOM Control enables modern communication capabilities of multiple units