



Product brochure

Vertiv™ SmartIT for Enterprise

Pre-integrated, pre-validated rack-level
AI infrastructure, engineered as one solution





The demands of AI for enterprise are accelerating rapidly, but the spaces and timelines are constrained. To adapt, today's commercial environments need to combine power, cooling, and controls in a systematic way.

Enterprise AI applications in healthcare, finance, manufacturing, and research depend on infrastructure that many existing environments were not designed to support. Vertiv™ SmartIT delivers AI infrastructure as one solution, integrating power, cooling, compute, and controls into a single rack-level package, delivered as one unit. No on-site integration. No multi-vendor coordination. Validated before it reaches your site.

Primary use cases

Vertiv™ SmartIT is designed for enterprise AI workloads in production environments where teams need a faster, more repeatable path from validated use case to operational infrastructure.

- Enterprise AI and real-time analytics.
- Generative AI and machine learning workloads.
- High-performance computing.
- AI networking and storage.
- Larger enterprise AI pod deployments that may extend to Vertiv™ SmartRun-based engineered solutions.
- Distributed enterprise AI deployments that need to fit within existing footprints and scale as requirements grow.

Design rationale

- **Rack-level building block:** Support rack and storage rack, power, cooling, and rack infrastructure are packaged into a defined footprint that can support one to three-rack deployment models.
- **Factory-integrated and tested:** Each module is integrated and tested before delivery to reduce field integration work.
- **Enterprise-ready design:** The solution is sized and configured for enterprise environments with limited space and existing infrastructure constraints.
- **Full power and thermal chain:** Vertiv™ SmartIT integrates rack-level power, direct-to-chip liquid cooling, rear door heat exchange, and rack infrastructure.
- **NVIDIA and OCP-compliant architecture:** The solution uses Vertiv™ Open Rack for NVIDIA MGX infrastructure for NVIDIA Blackwell-based NVL72-class architecture and OCP-compliant rack deployment.
- **Rack-level monitoring and automation:** The integrated package supports monitoring, leak detection, and northbound communication through standard protocols.
- **Scalable deployment model:** Organizations can start with a single rack system and expand to multiple modules as demand grows.



From one rack to many

Expand AI compute in modular steps. Same architecture. Same validation. Nothing redesigned. Each module ships pre-integrated and pre-validated against the same specification as the initial deployment. Integration, power infrastructure, and cooling design remain consistent across all configurations.

SKU 1 (IRM692-362-VQE0M-N00): Support rack

Provides support for network switches, leak detection, and houses CDU and Power Shelves. Pairs seamlessly with the AI compute rack to enable a complete, deployment-ready infrastructure.

SKU 2 (IRM692-362-00E00-N00): Storage rack

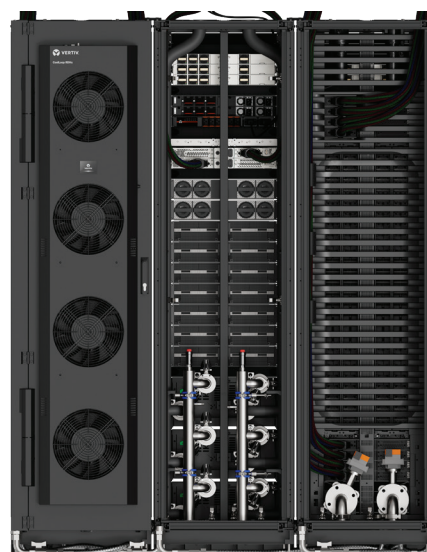
Purpose-built for storage deployments, featuring two 60A 3-phase PDUs with 69 kVA total capacity for reliable power distribution. Complements the AI compute rack to deliver a unified, high-density solution.

SKUs	Rack configuration	Best suited for	Electrical capacity
IRM692-362-VQE0M-N00	Support rack	Provides storage support for AI compute, leak detection, and houses the CDUs and power shelves (33kW). Pairs with the AI computerack for a deployment-ready infrastructure	66 kW
IRM692-362-00E00-N00	Storage rack	Purpose-built for storage deployments with two 60A 3-phase PDUs at 69 kVA total capacity. Complements the AI compute rack for a unified solution	69 kVA

**NVIDIA DGX Blackwell-based NVL72 provided by NVIDIA*

Scope boundary:

Site and facility preparation are outside the Vertiv™ SmartIT scope. This includes upstream power distribution, utility feeds, chilled-water or building water systems, floor space, structural changes, and other building-level work needed to connect and support the rack deployment package.



Converging infrastructure layers

Rack-scale compute

An outline of the enclosure, compute, and storage-rack power components included in each configuration.

Components	Function	SKU 1 - Support rack	SKU 2 - Storage rack
Vertiv™ Open Rack for NVIDIA MGX	MGX-compliant enclosures for Blackwell-based NVL72 architecture	1	1

Power train

Rack-level DC power conversion and optional UPS protection to support high-density compute.

Components	Function	Support rack	Storage rack
Vertiv™ PowerDirect Shelf (33kW shelves, 50VDC)	Rack-level DC power conversion (Compute racks)	2	—
Vertiv™ Liebert® APM2 UPS + Battery Cabinet	Modular UPS protection; up to 97.5% efficiency	Optional	Optional
Vertiv™ PowerIT Monitored Rack PDU (Switched, outlet-level)	Intelligent AC power distribution (Storage rack)	—	2
Vertiv™ PowerIT Rack Transfer Switch	Redundant power transfer	2	2

Thermal chain

Liquid and air-cooling work together to manage high-density AI heat loads across the selected rack-level configuration.

Components	Function	Support rack	Storage rack
Piping, valves and actuator assemblies	Facility water loop isolation and flow control	Comes with Support rack	—
Vertiv™ CoolChip CDU 121	Direct-to-chip liquid cooling (121kW per unit)	3	—
Vertiv™ Liebert® DCD47 Rear Door Heat Exchanger	Supplemental air cooling; 47kW room-neutral per rack	1	1

Monitoring and services

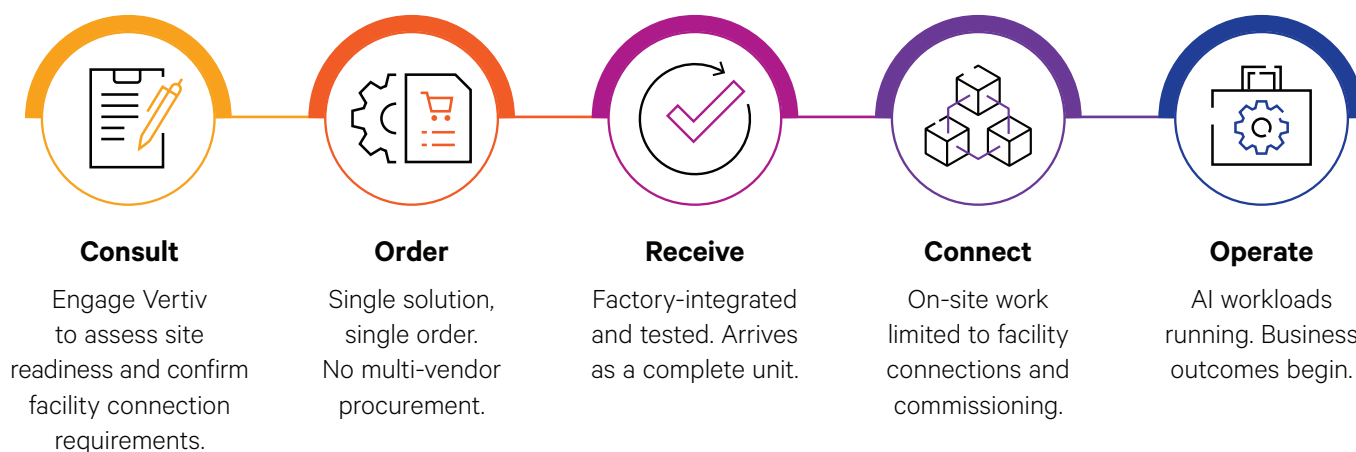
Every module includes rack-level leak detection and response, plus end-to-end services from installation through commissioning.

Components	Function	Support rack	Storage rack
Vertiv™ Avocent® ACS 804	Leak detection and response gateway	1	—
Services & One-year warranty	Installation, commissioning—including flush and fill—and project management	Included	Included
Vertiv™ Avocent® RM1048P Rack Manager	IT infrastructure management	2	—



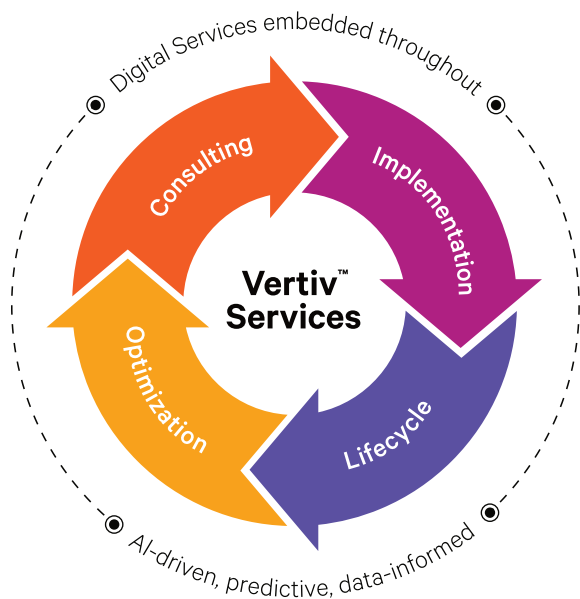
Get started

Move Vertiv™ SmartIT from delivery to operation through a five-step path and prepare the rack-level AI infrastructure for production workloads.



Vertiv™ Services

Support Vertiv™ SmartIT beyond startup with lifecycle services for installation, commissioning, and ongoing maintenance.



1. Comprehensive portfolio of services to address technical and business challenges, simplify operations, and reduce costs.
2. Global team of trained specialists supporting every phase of data center deployment and operation.
3. Standardized, documented, and validated processes leveraging automation tools and proven methodologies.

