



Stay Ahead of Change with VSP One Block for Mission-Critical Workloads

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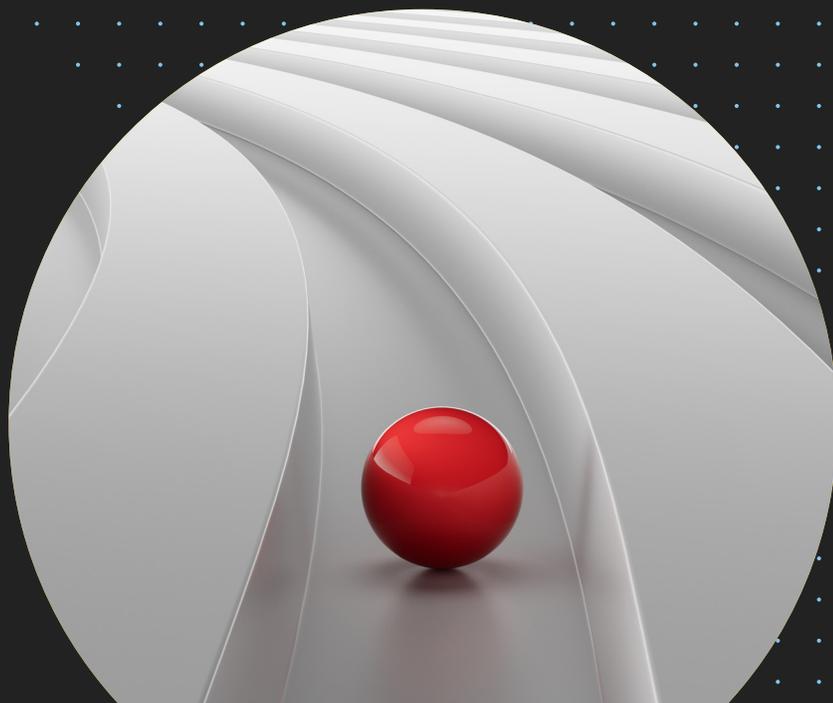


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Solution Profile

Stay Ahead of Change With VSP One Block for Mission-Critical Workloads

Innovation's most powerful data engine



Power and Speed Without Complexity

Accelerate mission-critical workloads with blazing NVMe speed, simplified management and intelligent observability, guaranteeing secure, resilient performance across the enterprise*

Peace of Mind

Secure, resilient storage for enterprise continuity with built-in encryption compliance tools and certified active-active multi-data-center protection against threats, outages and data loss

Future-Scale, Built To Last

Scalable, sustainable storage with seamless upgrades to next-generation, smart compression and energy efficiency, reducing cost, complexity and carbon emissions

Enterprises must modernize block storage to meet rising demands for performance, security and efficiency across mission-critical business workloads.

Modern enterprises are experiencing explosive growth in high-performance workloads — from AI development and big data analytics to scalable operations and virtual environments. These advances are driving impressive business outcomes but placing immense pressure on legacy infrastructure.

Block storage systems must now deliver faster transaction processing, lower latency and continuous availability to support mission-critical applications. As organizations enter the AI era, they need infrastructure that can scale efficiently, simplify operations and adapt quickly to change.

Industries like healthcare, financial services and e-commerce rely on resilient, high-speed systems to ensure compliance, protect sensitive data and deliver seamless customer experiences. Data-driven businesses also require rapid insights from massive datasets to guide strategy and innovation.

To stay competitive, enterprises must modernize their digital core with block storage solutions that support real-time analytics, personalized services and always-on operations — while reducing complexity, boosting agility and enabling sustainable growth.

Accelerated Workload Performance

Boost performance and reduce complexity with blazing all-flash NVMe speed and ultra-low latency.

Simplify Enterprise-Wide Management

Streamline operations via fleet-wide, unified control, zero-touch setup and mobile observability tools.

Ensure Dependable, Secure Resilience

Protect data with certified encryption, rapid recovery and guaranteed cyber resilience.

Sustainable Scalability, Efficient Growth

Scale confidently with energy-efficient upgrades, smart compression and flexible architecture, designed for growth.

* For open systems and mainframe environments.

VSP One Block High End: Enterprise Block Storage for the AI Era

Hitachi Vantara Virtual Storage Platform One Block High End (VSP One Block High End) is engineered to meet the infrastructure demands of the AI era. It delivers uncompromising performance with all-flash NVMe architecture, Intel CPUs and PCIe for ultra-low latency across open systems and mainframe environments.

Compression accelerator module (CAM) and adaptive data reduction optimize efficiency — even on uncompressible data. Management is simplified via VSP 360 management software and AIOps-powered observability, reducing operational overhead. Resilience features like immutable snapshots and integration with ransomware detection ensure data integrity and business continuity.

Security is embedded with end-to-end encryption, secure boot and compliance certifications (FIPS 140-3, Common Criteria). Scalable architecture supports up to 288 x 60TB SSDs and 12 controllers, with energy dashboards and dynamic carbon reduction (DCR) for sustainability. Hybrid/multicloud support, workload consolidation and automation (Red Hat Ansible) provide agility for evolving workloads.

VSP One Block High End transforms storage into a strategic asset — delivering speed, simplicity, resilience and sustainability for digital transformation. With VSP One Block High End, you're not just investing in storage — you're building a digital foundation for the future with innovation's most powerful data engine.

“With the Hitachi Vantara storage solution, we can support continued growth without compromising our customer-first philosophy.”

Hakan Ates, CEO, DenizBank

Use Cases

Performance Without Compromise

VSP One Block High End is engineered for speed. Powered by the latest Intel processors and PCIe architecture, it delivers blazing-fast performance for the most demanding workloads — whether AI training, real-time analytics or high-volume transaction processing.

- All-flash NVMe architecture ensures ultra-low latency and high throughput across open systems and mainframe environments.
- Next-gen hardware, CAM and adaptive data reduction deliver high performance with impressive efficiency — even on uncompressible data.
- High-density SSD support scales up to 288 x 60TB NVMe drives, enabling massive capacity with minimal footprint.
- Mainframe acceleration with 32G IBM FICON® support ensures low-latency performance for IBM DB2® and other mission-critical workloads.
- Future-ready connectivity includes 64G Fibre Channel, 100G TCP and 25G iSCSI, supporting evolving enterprise needs.

Whether consolidating workloads or scaling AI pipelines, VSP One Block High End eliminates infrastructure bottlenecks, accelerates data-driven insights and enhances customer experiences. VSP One Block High End empowers organizations to consolidate workloads.

Simplicity at Scale

Complexity is the enemy of agility. VSP One Block High End simplifies storage management across your entire environment — on-premises and hybrid cloud — so your teams can focus on innovation, not infrastructure.

- VSP 360 provides unified, fleet-wide data management with centralized visibility, guided configuration workflows and zero-touch installation.
- VSP One Block Administrator streamlines system setup and administration with intuitive tools and automation.
- Mobile-enabled control via the VSP 360 mobile app and Clear Sight Observability gives IT teams real-time access to system health, capacity planning and alerts — anytime, anywhere.
- AIOps-powered insights deliver intelligent observability, enabling faster troubleshooting and data-driven decision-making.
- Standards-based APIs and Linux-based auto multiple choice (AMC) software simplify integration and operations across diverse environments.

From large-scale deployment to enterprise-wide day-to-day management, VSP One Block High End reduces operational overhead and accelerates time to value.

Resilience You Can Trust

In today's threat landscape, resilience is non-negotiable. VSP One Block High End delivers enterprise-grade protection to keep your data safe, available and recoverable — no matter what.

- Snapshot and replication technologies ensure rapid recovery and business continuity.
- Cyber Resilience Guarantee* provides clean data recovery and immutable snapshots to protect against ransomware and data corruption.
- Integrated ransomware detection offers 99.997% accurate anomaly detection and clean recovery point identification.
- Hardware Root of Trust (HrOT) and zero-trust architecture enforce secure boot and least-privilege access control.
- FIPS 140-3 Level 2 and Common Criteria certifications ensure compliance with the most stringent security standards.
- Mainframe-specific resilience includes IBM-compliant secure endpoints, 4DC (planned), IBM GDPS® support and the Hitachi Mainframe Cyber Resiliency solution with secure vaulting.

With VSP One Block High End, you can operate confidently, knowing your data is protected and your business is always on.

Security Built In, Not Bolted On

Security is foundational to VSP One Block High End. It's designed to meet the strictest compliance requirements while minimizing risk and operational burden.

- End-to-end encryption protects data at rest and in transit.
- Integrated data protection and replication management ensure compliance across workloads.
- Secure system architecture includes Linux-based array management controller (AMC), secure boot and role-based access controls.
- Mainframe security features include 32G FICON with IBM Fibre Channel Endpoint Security (IFCES) encryption and support for Ansible automation.
- Automated audit preparation and policy enforcement simplify compliance reporting and reduce manual effort.

Whether you're in healthcare, finance or government, VSP One Block High End helps you meet regulatory demands while keeping sensitive data secure.

Scalable Efficiency for Sustainable Growth

As data volumes grow, so do energy costs and environmental impact. VSP One Block High End is designed for sustainable scalability — helping you grow without compromise.

- Scale from 4 to 12 tightly coupled controllers to meet performance and capacity needs.
- Adaptive data reduction and next-gen compression reduce storage footprint without sacrificing speed.
- Dynamic carbon reduction (DCR) and energy dashboards help track and reduce CO₂ emissions.
- Sustainability reporting provides actionable insights to improve energy efficiency and meet ESG goals.
- Unified OS and management platform across on-prem and cloud environments reduces training needs and operational complexity.

With VSP One Block High End, you can scale confidently, supporting business growth while meeting sustainability targets.

Agility for the AI Era

The AI era demands infrastructure that's not just fast and secure, but also agile. VSP One Block High End is built to adapt to changing workloads, business models and innovation cycles.

- Support for AI and analytics workloads with high-speed NVMe and scalable architecture.
- Real-time observability and AIOps enable proactive management and faster decision-making.
- Workload consolidation across open systems and mainframe simplifies operations and improves resource utilization.
- Flexible deployment options and standards-based APIs support enterprise-scale hybrid and multicloud strategies.
- Ansible automation templates accelerate deployment and reduce manual tasks.

Whether you're building AI factories, scaling digital services or modernizing legacy systems, VSP One Block High End enhances infrastructure flexibility, speeds up time-to-market and empowers digital transformation that gives you the agility to lead your organization into the future.

*For open systems only.

Why VSP One Block High End?

In a world where data is the new currency, your storage infrastructure must be more than fast — it must be intelligent, resilient and future-ready. Hitachi Vantara Virtual Storage Platform One Block High End delivers on all fronts:

- **Performance** to power AI, analytics and mission-critical workloads.
- **Simplicity** to streamline operations and reduce complexity.
- **Resiliency** to protect against threats and ensure business continuity.
- **Security** to meet compliance requirements and safeguard sensitive data.
- **Scalability and efficiency** to grow sustainably and reduce TCO.
- **Agility** to adapt to change and accelerate innovation.
- **Sustainability** to reduce CO₂ emissions via consolidation and dynamic carbon reduction.

With VSP One Block High End, you're not just investing in storage — you're building a digital foundation for the future with innovation's most powerful data engine.

Learn more →



About Hitachi Vantara

Hitachi Vantara is transforming the way data fuels innovation. A wholly owned subsidiary of Hitachi, Ltd., we're the data foundation the world's leading innovators rely on. Through data storage, infrastructure systems, cloud management and digital expertise, we build the foundation for sustainable business growth.

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