Consolidate and automate more business-critical workloads in a small form factor, backed up by a 100% data availability guarantee.

DATA SHEET

Hitachi Virtual Storage Platform G Series Hybrid-Flash Midrange Cloud Solutions

Modernize Your Data Center With an Agile Hybrid-Flash Infrastructure

Businesses are aware of the benefits of adopting hybrid-flash solutions to obtain maximum value from their applications, but they are also under increasing pressure to return business value. Consolidation of workloads with minimal investment is the aim, providing huge performance in the smallest footprint possible while extracting business insights. At the same time, it is critical that these cloud solutions are simple to implement and use, while delivering enterprise reliability and operational simplicity.

With the latest midrange hybrid-flash arrays from Hitachi, we can help. Delivering data faster to improve end user experiences is one thing, but few arrays support the advanced analytical and artificial intelligence (AI) capabilities in such a compact two-unit (2U) form factor. Combining our hybrid-flash arrays with Hitachi Remote Ops monitoring system and its analytics capabilities allows us to provide the best portfolio to proactively analyze, support and maintain the health of your cloud solutions.

Data Efficiency

Hitachi Virtual Storage Platform G series (VSP G series) enables the seamless automation of the data center with a broad range of efficiency technologies

that deliver maximum value and make ongoing costs more predictable. It allows organizations to focus on strategic projects and to consolidate more of their workloads while using a wide range of media choices.

The benefits start with Hitachi Storage Virtualization Operating System RF (SVOS RF), which includes an all-new enhanced software stack. SVOS RF offers up to three times greater performance than our previous midrange models, even as data scales to petabytes. Using enterprise-class solid-state drives (SSDs), SVOS RF accelerates read and write operations for a lower response time. Combining this with high capacity storage media and placing data on the optimal performance tier, we offer higher workload consolidation than ever before.

All VSP G series models have a symmetric active-active controller design. This design reduces the cost and complexity of path management because volumes can be accessed via host ports on any controller with minimal performance difference. VMware users can activate the round-robin policy for better network utilization.

Agile Data Infrastructure

Powered by SVOS RF, Hitachi VSP G series for midrange delivers up to 1.2 million IOPS of performance. These arrays come with a choice of SSDs, performance hard disk drives (HDDs) and high-capacity HDDs to reduce the overall cost per terabyte of data stored, all starting in a 2U form factor.

With VSP G series, high-speed data transfers are a given, but we now automate these workloads with an enhanced, flash-aware stack that can deliver a company experience based on policy and service level agreements (SLAs). By self-analyzing our own environment, we can deliver scalability through advanced active-flash tiering that analyzes data streams in real time. It moves data from disk to flash for rapid access by applications, and back to disks for cost optimization. This enhanced tiering allows organizations to meet demanding SLAs for performance with a cost-effective mix of flash and disks.

Flash-Powered Cloud Platform

Business partners can access self-service templates for provisioning and protecting data for their applications. This gives them a public-cloud-like experience when accessing IT resources, allowing for a flexible consumption environment to align better with business benefits.

IT Economics

Hitachi Vantara all-flash cloud platforms lower costs by tailoring payments to help improve return on investment (ROI) and align with budgets. Our flexible offerings enable you to upgrade and refresh when you need to improve life-cycle management.

Using Hitachi Remote Ops monitoring and analytics features, you can rely on 28 years of data collection experience to proactively support cloud solutions. By looking at all performance and support telemetry from Remote Ops customers, we can predict when an issue might arise and proactively take action to mitigate downtime.

VSP G series also offers support for containers to allow DevOps to accelerate cloud-native application development. Not only can this storage be provisioned in seconds, but it also can provide persistent data availability, all the while being orchestrated by industry-leading container platforms (Docker SWARM, Kubernetes). Where Hitachi differs is in our ability to enable these workloads to be moved into an enterprise production environment seamlessly, not only saving money but also reducing support and management costs.

Modern Data Protection

To protect the lifeblood of your business and safeguard your data, Hitachi provides the industry's most comprehensive 100% data availability guarantee. Built on legendary Hitachi reliability, VSP G series offers complete system redundancy by leveraging hot-swappable components, nondisruptive updates and outstanding data protection. The VSP G series is the best choice for hybrid-flash storage operations that need to stay up and running.

Each VSP G series system includes a suite of data protection software that eliminates backup windows and accelerates recovery via snapshots. System configuration is handled with a simple, easy-to-use policy management and workflow solution.

Advanced data replication software is available to enable robust business-continuity solutions among multiple data centers. These solutions include active-active metroclustering with global-active device. Available across the VSP G series, global-active device ensures the highest data protection data protection: zero downtime with no data loss.

TABLE 1. HITACHI VIRTUAL STORAGE PLATFORM G SERIES MIDRANGE SPECIFICATIONS

	VSP G350	VSP G370
Performance	Up to 600K IOPS 9GB/s bandwidth	Up to 1.2M IOPS 12GB/s bandwidth
Max. Flash Drives Note: SSD = solid-state drives	192 SSD, 192 SFF HDD, 252 LFF HDD	288 SSD, 288 SFF HDD, 372 LFF HDD
Max. Raw Capacity	5,778TB (SSD), 3,454TB (HDD)	8,667TB (SSD), 5,098TB (HDD)
Disks Supported	30TB SSD, 15TB SSD, 7.6TB SSD, 3.8TB SSD, 1.9TB SSD, 480GB SSD, 14TB 7.2K HDD, 10TB 7.2K HDD, 6TB 7.2K HDD, 2.4TB 10K HDD, 1.2TB 10K HDD, 600GB 10K HDD	
Host Interfaces Note: FC = Fibre Channel	16x FC: 16Gb/s, 32Gb/s 8x iSCSI: 10Gb/s	
Total Efficiency Guarantee Ratio*	Up to 7:1	Up to 7:1
RAID Supported**	RAID-1, RAID-5, RAID-6	

*The Total Efficiency Guarantee of up to 7:1 for the VSP G350 and VSP G370 models, when configured entirely with flash drives, covers savings from data deduplication, compression, thin provisioning and snapshots.
**RAID-1 selection mirrors blocks across two drives and then creates a striped set across multiple drive pairs. This is commonly referred to as RAID 1+0.

AI Operations Software

All new VSP G series solutions include end-to-end analytics "out of the box": Hitachi Ops Center Analyzer constantly analyzes the telemetry from the data center stack, to optimize application performance. It does this by identifying bottlenecks faster, preventing unwanted capacity conflicts and providing insight into faultfinding. Further, optional analytics enable budget planning and forecasting, delivering the best experience available.

Organizations have the option to take this one step further by implementing artificial intelligence management practices with Hitachi Ops Center Automator. This software provides application-aware workflow automation, incorporating actual capacity and performance analysis. It streamlines provisioning across hypervisor, compute, network and storage resources and accelerates the delivery of optimized resources, on demand.

VSP Software Packages Datasheet

READ

Simplify Modernization of Your Data Center

VSP G series midrange systems come packaged with a rich set of value-added software. The Foundation software package includes local and remote replication with data protection, data mobility for nondisruptive data migration and data analytics software. The Advanced package includes everything in Foundation plus metro clustering and automation software. Enhanced software packaging makes choices simpler and easier than ever before.

For additional agility, all VSP models can be unified with our Hitachi NAS Platform gateways for block and file workloads or Hitachi Content Platform for block and object workloads. Or, they can be part of a converged solution in our Hitachi Unified Compute Platform.

Think of a fully automated end-to-end private cloud that has workload protection, predictive analytics, live multisite capability and agnostic workload automation. Integrated directly with your ticketing solution, this is a midrange game-changer!

Hitachi Vantara

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