



KEY FEATURES

- Enterprise-Class NVMe Systems
- Up to 1 Million IOPS single system
- 20GB read/10GB write single unit
- Integrated SAN/NAS with Cloud Gateway Option
- Dual Active-Active Controllers
- NVMe 25 Bay scalable to 896 drives via JBOD SAS, SSD, 10K, 7200NL drives
- High Availability & IDR
- No Single Point of Failure
- Centralized GUI Firmware with remote replication, SSD caching, Auto Tiering, Snap Shot, Thin Provisioning, Built-in Cloud Gateway
- Three Years Warranty and Support included and expandable up to 10 years

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PAC Storage PS NVMe

NEXT GENERATION DATA STORAGE

PAC Storage PS NVMe is the ultimate of high-performance solutions for enterprises with its unprecedented advantages in performance and flexibility. The system offers Intel's advanced 8-Core CPU platform and reaches up to 20,000MB/s Read and 10,000MB/s Write speed and 1 Million IOPS under a single unit under high workloads. The PS NVMe is designed for extreme performance in the RAID and can host hybrid environments via expansion with new auto-tiering technologies. The system is suitable for running file and block hybrid environments adopting SAN, NAS, and Cloud integration.

APPLICATIONS

Media & Entertainment 	Virtualization 	Database 	Surveillance 	Backup 	Exchange
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Symmetric active-active controllers

PAC Storage PS NVMe offers symmetric active-active controllers for performance and high availability. Hosts can access the same LUNs simultaneously via both controllers. I/O are more equally distributed across both controllers and all paths, effectively minimizing costly path management time. In the event of a path failure, I/O can automatically continue through the remaining paths with little or no failover.

Optimized for U.2 NVMe SSD

PAC's NVMe has a built-in intelligent algorithm to increase SSD lifespan and prevent simultaneous failure of multiple SSDs and consequent the data loss

Maximized Storage Efficiency

Utilize U.2 NVMe SSDs for high-performance IO and NL-SAS/ SATA HDDs for massive data archive with automated storage tiering. In addition, the cloud storage gateway offers unlimited scalability and flexible "scale on demand" model, which allows you to expand your storage capacity as needed, without upfront investment, to fit your capacity requirements as they evolve. By integrating the Intelligent Gateway Engine and supporting a wide range of both private cloud and public cloud services, the PAC PS NVMe offers various cloud functions such as Cloud Tiering, Cloud Cache and Cloud Backup to make the most of cloud's advantages.

Comprehensive Data Protection and Security

Security threats are by no means the only concern when it comes to safeguarding data. Unexpected disk failures, natural disasters and power outages all up the risk of data loss. PAC Storage PS NVMe ensures that risk is minimal with its integrated backup functions such as Intelligent Drive Recovery (IDR), snapshot, local replication, remote replication, and file-level rsync.

Easy Management & Visibility

PAC Systems provide single namespace for easier access and auto-balancing to reduce the burden of IT storage management.

	UP TO 25 Single Unit & 896 Drives via Hybrid Expansion
	UP TO 8 Core Intel CPU
	UP TO 512GB Cache Memory
	UP TO 1Million IOPS
	UP TO 24 Host Ports

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PAC Storage PS NVMe

PHYSICAL SPECIFICATIONS		PAC Storage NVMe		
Controller		Dual-redundant		
Max. SSD cache pool		3.2TB		
Cache backup techniques		Super capacitor+Flash module		
Power supply unit	Power supplies AC Voltage	Redundant (1+1) hot swappable 800W x 2 (80 PLUS Platinum) VAC @10A to 200-240VAC @5A		
CPU		Intel Xeon D 8-Core		
Cache memory (per system)		64GB upgradeable to 512GB		
Max. host board number		4		
Onboard SAS expansion ports (for hybrid JBODs)		4 x 12Gb/s SAS wide ports		
Onboard iSCSI ports (10GbE SFP+)		8		
Host board ports		4 x 16Gb/s FC ports	2 x 32Gb/s FC ports	2 x 10GbE ports (SFP+)
		2 x 10GbE ports (RJ-45)	2 x 25GbE ports (SFP28)	2 x 12Gb/s SAS ports
Note: 1. The two controllers must have identical slot settings. 2. Fiber Channel supports point-to-point and switch mode.				
Host board + onboard ports (max.)		24		
Max logical drives number		32		
Max logical drives capacity		512TB		
Configurable stripe size		16KB, 32KB, 64KB, 128KB, 256KB, 512KB, or 1024KB per logical drive		
Configurable writes policy		Write-Back or Write-Through per logical drive. This policy can be modified.		
Max. pool size		2PB		
Max. pool number		32		
Max. volume size		2PB		
Max. volume number (per pool/per system)		1024		
Max. host LUN mapping number		4096		
Max. reserved tag number per host-LUN connection		Up to 256		
Max. host port connection number (per FC)		24		
File Level	Max. file system size	2PB		
	Max. number of user accounts	20000		
	Max. number of user groups	512		
	Max. number of folder sharing	2048 (NFS/CIFS/FTP) 255 (AFP)		
	Max. number of rsync jobs	1024		
	Max. number of rsync concurrent processes	64		
Max. number of concurrent connections (NFS/CIFS/AFP/FTP)		16 GB memory: 200	32 GB memory: 512	
		64 GB memory: 1024	128 GB memory: 2048	
RAID options		RAID 0, 1, 3, 5, 6, 10, 30, 50, 60		
Protocol support		File Level Protocol: CIFS/ SMB: Version 2.0/3.0, NFS: Version 2/3/4, AFP, FTP, FXP, WebDAV Block Level Protocol : FC, iSCSI, SAS Object Level Protocol: RESTful API		
PS Cloud Gateway		Support the integration with following cloud providers: Amazon S3, Microsoft Azure, Alibaba AliCloud, OpenStack, Baidu Cloud, Tencent Cloud and Google Cloud ,Wasabi Cloud		
PHYSICAL SPECIFICATIONS				
Form factor		2U-25 Bay		
Supported Drives		2.5" U.2 NVMe SSD		
Dimensions (without chassis ears/protrusions)		449(W) x 88(H) x 589.6(D) mm		
SOFTWARE SPECIFICATIONS				
Self-encrypting drives		Unique factory encryption secures data plus makes deletion simple and complete		
Thin Provisioning (default included)		"Just-in-time" capacity allocation optimizes storage utilization and eliminates allocated but unused storage space		
Local Replication	Snapshot	File Level Snapshot per folder: 1024		
		Block per source volume	Standard License: 64 / Advanced License: 256	
	Snapshot images per pool	Standard License: 128 / Advanced License: 4096		
	Volume Copy/Mirror	Block Replication per source volume	Standard License: 4 / Advanced License: 8	
Replication pairs per system		Standard License: 16 / Advanced License: 256		
Remote Replication(Block level)(optional)		Replication pairs per source volume: 8		
		Replication pairs per system: 64		
Note: The maximum number of replication pair per source volume is up to 8, regardless of remote asynchronous/remote				
Remote Replication(File Level)		Support Rsync with 128-bit SSH encryption		
Automated Storage Tiering(optional)		2 or 4 storage tiers based on drive types		
		SSD supports Automated data migration with scheduling options		
PAC Cloud Gateway	File- level	Cache Mode: A copy of frequently accessed file is kept on a local storage and all files are also uploaded to cloud Sync Mode: Synchronizing files between local storage and cloud.		
	Block- level	Cache Mode: A copy of frequently accessed data is kept on a local storage and all data are also flushed to cloud. Backup Mode: All data are kept on local storage and all data are also flushed to cloud. Tiering Mode: Frequently accessed data is kept on local storage and infrequently accessed data is migrated to cloud		