



KEY FEATURES

- Enterprise-Class NVMe Systems with U.2 & U.3
- 100 GbE Connectivity
- Up to 1.1 Million IOPS single system
- 24 GB/s read/12 GB/s write single unit
- Integrated SAN/NAS with Cloud Gateway Option
- Dual Active-Active Controllers
- NVMe 24 Bay scalable to 896 drives via JBOD SAS, SSD, 10K, 7200NL drives
- Single Namespace
- High Availability & IDR
- No Single Point of Failure
- Centralized GUI Firmware with remote replication, SSD caching, Auto Tiering, Snap Shot, Thin Provisioning, Auto-Balancing
- 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 New Generation brings ultimate upgrades with PCIe 4.0, 100GbE connectivity, Intel's latest Ice Lake CPU and more. This system is a high-performance solution for enterprises with its unprecedented advantages in throughput, IOPS and flexibility. The PCIe 4.0 NVMe system offers Intel's advanced Ice Lake 6-Core Xeon CPU platform and reaches up to 24GB/s Read and 12 GB/s Write speed and 1.1 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 auto-tiering. The system is suitable for running file and block hybrid environments adopting SAN, NAS, and Cloud integration. Also new is single namespace capabilities for easier data access.

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 & U.3 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 24 Single Unit & 896 Drives via Hybrid Expansion
	UP TO 6 Core Intel Ice Lake CPU
	UP TO 512GB Cache Memory
	UP TO 1.1 Million IOPS
	UP TO 100 GbE Connectivity

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PAC Storage PS NVMe

PHYSICAL SPECIFICATIONS		PAC Storage NVMe	
Controller		Dual-redundant	
CPU		Intel Xeon D 6-Core	
Cache memory (per system)		64GB upgradeable to 384GB	
Max. host board slots		4	
Onboard SAS expansion ports (for hybrid JBODs)		0	
Onboard iSCSI ports (10GbE SFP+)		0	
Host board ports		4 x 16Gb/s FC ports	2 x 32Gb/s FC ports
		2 x 25GbE ports (SFP28) RDMA/RoCE	1 x 100GbE ports (QSFP28), RDMA/RoCE
		2 x 100GbE ports (QSFP28), RDMA/RoCE	
		Note: 1. The two controllers must have identical slot settings. 2. Fiber Channel supports point-to-point and switch mode.	
Max logical drives number		30	
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		30	
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)		128	
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	
RAID options	Max. number of concurrent connections (NFS/CIFS/AFP/FTP)	2048 (NFS/CIFS/AFP) 1024 (FTP)	
		RAID 0, 1, 3, 5, 6, 10, 30, 50, 60	
		File Level Protocol: CIFS/ SMB: Version 2.0/3.0, NFS: Ver. 2/3/4, AFP(Ver 3.1.12), FTP/FXP(vsftp 2.3.4), WebDAV Ver. 2.4.6	
Protocol support		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-24 Bay	
Supported Drives		2.5" U.2 & U.3 NVMe SSD	
Dimensions (without chassis ears/protrusions)		449(W) x 88(H) x 530mm	
Power supply unit	Power supplies	Redundant (1+1) hot swappable 530W x 2 (80 PLUS Platinum)	
	AC Voltage	100VAC @10A to 200-240VAC @5A	
SOFTWARE SPECIFICATIONS			
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)		4 storage tiers per pool	
		Automated data migration with scheduling options	