

PAC Storage All Flash

NEXT GENERATION DATA STORAGE

PAC Storage All Flash was built for high speed and low latency with stable high performance for enterprise workloads. It can reach more than 900K IOPS for random reads with a response time of less than 0.5 ms. The PAC Storage SSD Firmware was designed to optimize SSD performance with low latency and extend the lifespan of the SSD drives. The arrays provide broad options in terms of host connectivity, form factor and cloud integration choices to meet the demanding requirements in a modern data center. PAC Storage offers the ultimate ROI of All Flash arrays with its extreme high-performance and ultra-competitive price.

APPLICATIONS

Media & Entertainment 	Virtualization 	Database 	Surveillance 	Backup 	Exchange
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KEY FEATURES

- Enterprise-Class Unified Systems
- Integrated SAN/NAS with Cloud Gateway Option
- Dual Active-Active Controllers
- Scalable to 896 SSD enterprise drives
- Dual Active-Active Controllers
- High Availability & IDR
- No Single Point of Failure
- Centralized GUI Firmware with remote replication, SSD caching, Snap Shot, Thin Provisioning, Built-in Cloud Gateway
- 3 Year Warranty and Support included and up to 10 years

Symmetric active-active controllers

PAC Storage All Flash Next Generation 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.

Comprehensive Data Protection and Security

PAC Storage All Flash Next Generation series 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.

RAID 6 Protection

Purpose Built with SSD Optimization

The PAC All Flash extends SSD lifespan, lowers latency and raises performance. The SSD optimization allows less data is to be re-written and more free space is available giving higher throughput as the drive runs faster. The remaining life of every SSD is recorded to help users estimate the number of years and months of SSD availability. An alert message is issued with the remaining SSD life reaches a user-defined threshold.



New:
900K IOPS

32Gb FC, 25GbE Connectivity
Up to 512GB Cache Memory

	UP TO 896 Drives, 13.4 PB
	UP TO 8 Core Intel CPU
	UP TO 512GB Cache Memory
	UP TO 900K IOPS
	UP TO 24 Host Ports

PAC STORAGE

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PHYSICAL SPECIFICATIONS		All Flash 2000	All Flash 4000
Form Factor	2U 24-bay 2U 25-bay	X	X
Controller		Dual-redundant	
Max. SSD cache pool		3.2TB	
Cache backup techniques		Super capacitor+Flash module	
Power supply unit	Power supplies (Redundant/hot-swappable)	Redundant / hot-swappable: 460W x 2 (80 PLUS Bronze)	(3000/4000): 530W x 2 (80 PLUS Bronze) 1200W x 2 (80 PLUS Platinum)
	AC voltage (with PFC(auto-switching))	100VAC @ 8A to 240VAC @ 4A	(PS 3000/4000) 100VAC@10A to 240VAC@5A 100-127VAC@12.47A, 200-240VAC@7.08A
	Frequency	50-60 Hz	47-63Hz
CPU		2x Intel Broadwell-DE (Pentium) GS 2000/GS 2000T: 2 Core/4 Core	2x Intel® Xeon® 8-Core
Cache memory		16GB upgradeable to 128GB	32GB upgradeable to 512GB
Max. host board number		4	4
Onboard SAS expansion ports		2 x 12Gb/s SAS wide ports	4 x 12Gb/s SAS wide ports
Expansion board		2	2
Onboard ports (10GbE SFP+)			8
Onboard ports (1Gb RJ-45)		8	
Host board ports (per controller)		4 x 16Gb/s FC ports	4 x 16Gb/s FC ports
		4 x 1Gb/s iSCSI ports	2 x 32Gb/s FC ports
		2 x 10Gb/s iSCSI ports (SFP+)	2 x 10GbE ports (SFP+)
		2 x 10GbE ports (RJ-45)	2 x 10GbE ports (RJ-45)
		2 x 25GbE ports (SFP28)	2 x 25GbE ports (SFP28)
		2 x 40 Gb/s iSCSI ports (QSFP)	2 x 12Gb/s SAS ports
		2 x 56Gb/s InfiniBand ports	
	2 x 12 Gb/s SAS ports		
Host board + onboard ports (max.)		24	24
Max. logical drives number			32
Max. logical drives capacity			512 TB
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			4000
Max. reserved tag number per host-LUN connection			Up to 256
Max. host 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 Max. number of rsync concurrent processes		1024 64
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, FCoE, iSCSI, SAS, InfiniBand	
PS Cloud Gateway		Support the integration with following cloud providers: Amazon S3, Microsoft Azure, Alibaba AliCloud, OpenStack, Baidu Cloud, Tencent Cloud and Google Cloud	
PHYSICAL SPECIFICATIONS			
All Flash Series		2000 All Flash	4000 All Flash
Form factor		2U 24-bay	2U 25-bay
Supported drives		2.5" SSD	
Max. drives number		896(with expansion board)	
Rack Support		2U, 19-inch rackmount	2U, 19-inch rackmount
Dimensions (without chassis ears/protrusions)		447(W) x 88(H) x 500(D) mm	447(W) x 88(H) x 500(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	Snapshot images per source volume	Standard License: 64 / Advanced License: 256
		Snapshot images per pool	Standard License: 128 / Advanced License: 4096
	Volume Copy/Mirror	Replication pairs per source volume	Standard License: 4 / Advanced License: 8
		Replication pairs per system	Standard License: 16 / Advanced License: 256
Automated Storage Tiering(optional)		2 or 4 storage tiers based on drive types	
		SSD supports	
		Automated data migration with scheduling options	
SSD Cache(optional)		<ul style="list-style-type: none"> Accelerating data access for random read-intensive environments, such as OLTP Supports up to four SSDs per controller Recommended DIMM capacity for SSD Cache pool: 	
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	