

Flash-Optimized Hybrid Storage Arrays



Engineered for Efficiency

Demands for better storage performance, scalability, data protection, and simplicity continue to grow in today's datacenter. The rapid adoption of virtualization and server consolidation has further compounded the need for network storage that can keep up with these demands. Nimble Storage makes it possible for IT to tackle them all head on.

Nimble Storage designed its Cache Accelerated Sequential Layout (CASL™) architecture to help large and small IT organizations address their storage challenges. As the industry's first flash-optimized storage architecture designed from the ground up, CASL effectively combines the performance of flash for reads with a unique data layout optimized for writes. The result is high-performance, efficient storage. CASL also includes integrated data protection and management functionality required by today's demanding applications, eliminating the need for separate backup storage solutions and tools. These characteristics make the Nimble Storage CS-Series the ideal storage platform for mainstream IT applications in a variety of environments, ranging from midsize deployments with hundreds of users to large enterprises with thousands of employees.

Nimble Storage CS200 and CS400 Series

Choosing the right Nimble Storage array is simple. The CS200 Series is a good fit for midsize businesses or distributed sites of larger organizations, supporting workloads such as Microsoft applications, VDI, or virtual server consolidation. For IO-intensive workloads, such as transaction processing supported by Oracle or large-scale VDI deployments, the CS400 Series delivers higher performance. Nimble Storage arrays come standard with full software functionality, so there are no hidden costs.

Scale to Fit with Scale-Out Architecture

CASL's scale-to-fit capabilities make it easy to non-disruptively scale the CS-Series to meet both the growing capacity and performance needs of today's datacenter.

Storage can be scaled to hundreds of terabytes by adding disk shelves. Performance can be enhanced through the addition of higher capacity SSDs able to support larger amounts of active data. For additional throughput, a CS200 system can be upgraded to a CS400 non-disruptively.

Nimble Storage also enables scaling of performance and capacity beyond the physical limitations of a single array, to a storage cluster comprised of any combination of Nimble arrays. This seamless scaling of performance and capacity can help eliminate performance hotspots and storage silos, enabling substantial management efficiency and extending overall storage investment.

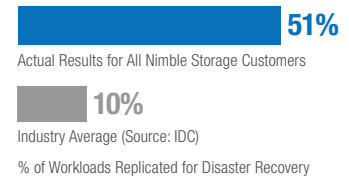
Nimble Storage hybrid arrays deliver the right mix of high performance and efficient capacity for mainstream workloads in IT organizations of all sizes.

“With Nimble we have reduced power consumption, cooling needs and rack usage, eliminated traditional backup and associated backup windows, shortened our recovery point objective, improved server performance, and improved perceived user experience.”

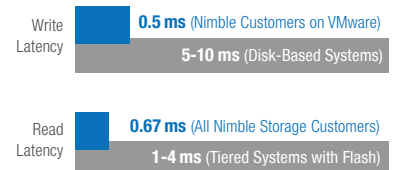
Lucas Clara
Director of Information Technology
Foster Pepper PLLC

Our Customers Protect 5x More Apps

% OF WORKLOADS REPLICATED FOR DISASTER RECOVERY



Our Customers Access Data 10x Faster



Our Customers Enjoy Virtually Zero Downtime



Nimble Storage Software

All software functionality is included with a Nimble Storage array. The list below shows some of the included software features.

- Dynamic caching
- Write-optimized data layout
- App-aligned block size
- Universal compression
- Thin provisioning
- Instant snapshots
- WAN-efficient replication
- Zero-copy clones
- App-integrated backup/profiles
- Non-disruptive scale-to-fit
- Scale out to a storage cluster
- Proactive wellness
- Non-disruptive upgrades
- Remote secure support
- Unified administration

InfoSight and Proactive Wellness

Nimble Storage InfoSight leverages the power of data sciences to drive increased operational efficiency across the spectrum of storage lifecycle activities. Nimble goes beyond the traditional support model to keep storage operating at peak efficiency and performance with virtually no downtime. The combination of proactive monitoring and analysis, remote technical support, and parts repair/replacement ensures smooth operations. Nimble Storage support also provides:

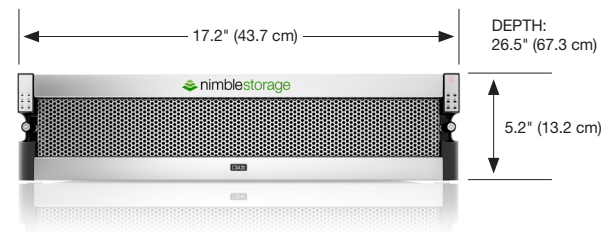
- 24x7 remote technical support center
- 4-hour or next business day part delivery
- 24x7 monitoring and response
- Software updates included

Product Specifications

Nimble Storage CS-Series	CS210	CS220	CS240	CS260	CS420 ¹	CS440	CS460
Controller Type	High Performance				Extreme Performance		
Raw Disk Capacity—Base (TB) ²	8	12	24	36	12	24	36
Effective Capacity—Base (TB) ²	4 - 9	8 - 16	17 - 33	25 - 50	8 - 16	17 - 33	25 - 50
Effective Capacity—Maximum (TB) ^{2,3}	38 - 76	109 - 218	117 - 234	125 - 249	109 - 218	117 - 234	125 - 249
Max Number of Expansion Shelves	1	up to 3					
Base Flash Capacity (GB)	160	320	640	1,200	—	640	1,200
x2 Flash Capacity (GB)	320	640	1,200	2,400	640	1,200	2,400
x4 Flash Capacity (GB)	640	1,200	2,400	—	1,200	2,400	—
x8 Flash Capacity (GB)	—	2,400	—	—	2,400	—	—
Network Connections Per Controller	4x 1GbE		6x 1GbE / 2x 10GbE + 2x 1GbE (G Model)				
SAS Connectivity Per Controller	1x 6Gb SAS						
Power Requirement	450W		500W		550W		

Physical and Environmental Specifications

Dimensions	5.2"H x 17.2"W x 26.5"D 13.2 cm x 43.7 cm x 67.3 cm 3 rack units
Weight	76 lbs.
Operating Temperature	10 - 35° C (50 - 95° F)
Non-Operating Temperature	0° C - 40° C (32° F - 110° F)
Operating Humidity	8 - 90%
Non-Operating Humidity	5 - 95%



Expansion Shelves	ES1-H25	ES1-H45	ES1-H65
Raw Disk Capacity (TB) ²	15	30	45
Effective Capacity (TB) ²	11 - 22	23 - 45	34 - 68
Flash Capacity (GB)	160	300	600
SAS Connectivity Per Controller	2x 6Gb SAS (2 module/shelf)		
Power Requirement	400W		

Notes

- The CS420 model is available in CS420-X2, CS420-X4, and CS420-X8 options only.
- Raw and effective capacities are calculated using Base 10 (i.e., 1 TB = 1,000,000,000,000 bytes) after excluding space for parity, spares, and system overhead; the range represents 0 to 2x compression.
- Maximum capacity is the capacity of the base array and maximum number of expansion shelves



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