The Nimble Storage CS-Series

TRUE EFFICIENCY. CONVERGED STORAGE.

Meeting the Needs of the Modern Datacenter

The growth of virtualization and server consolidation has compounded the need for storage to simultaneously deliver superior performance, increased capacity, and simplified data protection. Traditional storage architectures are unable to comprehensively meet these demands.

Nimble's patented Cache Accelerated Sequential Layout (CASL™) is the first storage architecture designed from the ground up to seamlessly integrate SSDs with high-capacity disks, delivering affordable performance, integrated backup and disaster recovery, and pain-free operations.

Performance and Capacity Efficiency

Nimble's CASL architecture coalesces random writes into a single RAID stripe, improving write performance by 10x -100x compared to traditional systems. Hot data is served from flash which responds to workload changes within milliseconds instead of hours or days.

Nimble's variable block-based compression technology delivers capacity savings of 30%-75% with no impact on system performance. Combined with highly efficient snapshots, thin provisioning, and zero-copy clones, Nimble offers the industry's best primary storage density, all in a 3U form factor.

Instant Backups and Restores

Nimble eliminates the constraints of traditional backup solutions. Thousands of snapshots can be stored with minimal space consumption, eliminating backup windows, allowing for more frequent recovery points, and enabling quick and efficient replication over a WAN.

Nimble integration simplifies application-consistent backups for Microsoft, Oracle, and VMware. Backups and restores can be completed in seconds, improving application-level recovery point objectives and recovery time objectives.
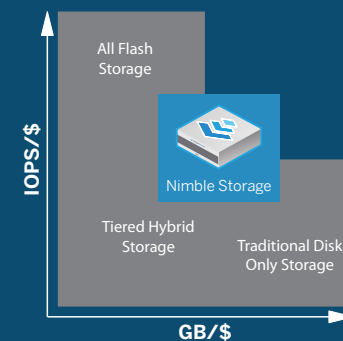
Pain-Free Operations

Nimble arrays are easy to purchase, set up, and use. A single SKU includes all hardware and software features; there are no extra-cost options. The arrays are designed to be managed by an IT generalist. An intuitive UI simplifies management and eliminates configuration and administration complexities. Built-in application profiles and protection templates make it easy to tune storage systems to optimize performance and data protection for individual workloads.
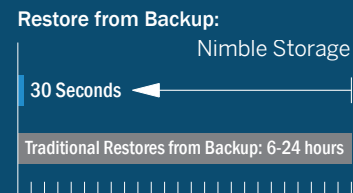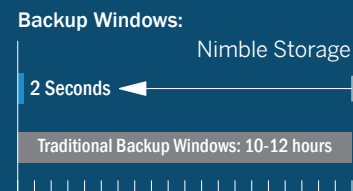
It is easy to keep Nimble arrays up and running. Firmware upgrades are completely non-disruptive. Built-in real-time monitoring and phone-home support flag problems before failures occur. Remote support access enables quick triage, troubleshooting, and remediation without the need for onsite access.

THE NO-COMPROMISE STORAGE ADVANTAGE

Unparalleled Performance *and* Capacity Efficiency

Dramatically Reduced Backup and Restore Times

Backup Windows:

Nimble Storage — 2 Seconds

Traditional Backup Windows: 10-12 hours

Restore from Backup:

Nimble Storage — 30 Seconds

Traditional Restores from Backup: 6-24 hours

Pain-Free Operations

Time to Install an Array:

Traditional Storage | Nimble Storage

Nimble CS-Series Converged Storage Array Technical Highlights and Specifications

Technical Highlights	Descriptions
Data Integrity	Dual-parity RAID (RAID6) without a performance penalty and with fast rebuilds Block checksums Block self-description for protection against misdirected reads/writes Background RAID scrubs Mirrored NVRAM
High Availability	Hot-swappable controllers with automated and transparent controller failover Redundant, hot-swappable components such as fans and power supplies Hot-swappable disk drives and flash SSDs
Built-in Features	Thin provisioning Zero-copy clones Universal compression Thin snapshots WAN-efficient replication
Backup/DR	Stores 30-90 days compressed primary data snapshots Stores 30-90 days replicated snapshots to offsite DR
Application Integration	Block size matched to application block size Built-in application profiles VSS and VMware integrated snapshots and replication vCenter plug-ins VAAI, SRM integrations Oracle integration
Security	Initiator group-based ACL CHAP Authentication
Management Interfaces	SNMP, SSH, HTTP, Web (SSL), Serial Console
Proactive Wellness	SMART monitoring for all drives Frequent heartbeats monitored by Nimble Support Real-time email alerts Configurable, secure remote access
Support	Auto-support (email home) 24 x 7 technical support
Hardware Chassis	3U
Dimensions	5.2"H x 17.2"W x 25.5"D
Weight	76 lbs.
Power Requirement	500W
Environmental	Operating temperature 10 - 35º C (50 - 95º F) Non-operating temperature 0 - 40º C (32 - 110º F) Operating humidity 8 - 90% Non-operating humidity 5 - 95%

Specifications	CS210	CS220 / CS220G	CS240 / CS240G	CS260 / CS260G
Raw Disk Capacity	8TB	12TB	24TB	36TB
Usable Disk Capacity (After RAID and Spare)	4TB	8TB	16TB	24TB
Effective Disk Capacity (Assuming 50% Compression)	8TB	16TB	32TB	48TB
Raw Flash Cache	160GB	320GB	640GB	1.2TB
Effective Flash Cache (Assuming 50% Compression)	320GB	640GB	1.3TB	2.4TB
Memory	24GB	24GB	24GB	24GB
Network Connections (Per Controller)	4x 1GbE	6x 1GbE / 2x 10GbE + 2x 1GbE	6x 1GbE / 2x 10GbE + 2x 1GbE	6x 1GbE / 2x 10GbE + 2x 1GbE

About Nimble Storage

Founded and led by storage industry veterans, Nimble Storage is the fastest growing storage vendor in history. Nimble solutions are built to eliminate the compromise among performance, capacity, ease of use, and price. Nimble's patented Cache Accelerated Sequential Layout (CASL™) is the first storage architecture designed from the ground up to seamlessly integrate SSDs with high-capacity disks, delivering affordable performance, integrated backup and disaster recovery, and pain-free operations. Nimble Storage solutions are available through a global network of world-class channel partners. For more information, visit www.nimblestorage.com.