

## Datasheet

# NetApp HCI

## Enterprise-Scale Hyper Converged Infrastructure Solution

### Key Benefits

#### Guaranteed Performance

- Consolidate mixed workloads
- Deliver predictable performance
- Provide granular control at VM level

#### Flexibility and Scale

- Optimize and protect existing investments
- Scale compute and storage independently
- Eliminate HCI tax

#### Automated Infrastructure

- Automate and streamline management
- Deploy rapidly
- Simplify via comprehensive API ecosystem

#### NetApp Data Fabric

- Move data anywhere
- Provide greater data visibility across clouds
- Optimize and protect all your data

### Are You Ready For Next?

Break free from the limits of today's hyper converged infrastructure solutions that can't consolidate all of your workloads, force you to scale in ways that strand resources, and throttle the performance required by next-generation applications. Stop making compromises, and instead, focus on innovation that can transform you into a data-centric organization.

NetApp is delivering on all of the promises of HCI. Now you can run multiple applications with guaranteed performance to confidently deploy HCI across your entire data center. Unleash the true power of your infrastructure by simplifying management and independently scaling both compute and storage resources. And NetApp HCI is Data Fabric ready out-of-the box so you can access all your data across any cloud—public, private or hybrid.

Transform and empower your IT organization so you can move faster, drive operational efficiency, and reduce costs. Realize the true promise of an enterprise-scale hyper converged solution with NetApp HCI.

### Confidently Deploy All Your Applications

One of the biggest challenges in any data center is delivering predictable performance, especially in the face of proliferating applications and workloads—many of which can be extremely resource intensive. Any time you have multiple applications sharing the same infrastructure, the potential exists for one application to interfere with the performance of another. Important applications, such as virtual desktop infrastructure (VDI) and database applications, have very different I/O patterns that tend to impact one another. NetApp HCI provides the solution for IT predictability challenges with unique Quality of Service (QoS) limits that allow the granular control of every application, eliminating noisy neighbors, meeting unique performance needs, and satisfying all performance SLAs.

### Scale On Your Terms

Unlike previous generations of HCI that have fixed resource ratios, NetApp HCI scales compute and storage resources independently. Independent scaling avoids costly and inefficient over-provisioning, eliminates the 10% to 30% "HCI Tax," and simplifies capacity and performance planning. NetApp HCI is available in mix-and-match small, medium, and large storage and compute configurations and can be scaled in 1 Rack Unit (RU), half-width increments (see specs below). Rapidly meet changing business needs while never buying more than you use again.

### Transform and Empower Your IT Operations

The holy grail of IT is to automate all routine tasks, eliminating the risk of user error associated with manual operations, while freeing up resources to focus on higher value assignments that drive business. NetApp HCI allows IT departments to become more agile and responsive by simplifying Day 0 deployment and ongoing management from Day 1 forward. The NetApp Deployment Engine (NDE) eliminates the majority of manual steps it takes to deploy infrastructure while the vCenter plug-in makes management with the VMware environment simple and intuitive. Finally, a robust suite of APIs enables seamless integration into higher-level management, orchestration, backup, and disaster-recovery tools.

### Unleash the Power of Data to Achieve a New Competitive Advantage

Enterprises are under tremendous pressure to harness today's wealth of data and apply it to create new value across the entire organization—all with limited time, skills, and budget. The NetApp Data Fabric allows the full potential of data to be unleashed across your environment—whether they be on-premises, public, or hybrid cloud. NetApp HCI is ready to integrate into the NetApp Data Fabric out-of-the-box for enhanced data portability, visibility, and protection.

### NetApp HCI. Enterprise-Scale.

Running on innovative SolidFire technology and delivered on a NetApp designed architecture, NetApp HCI is the only true enterprise-scale hyper converged infrastructure solution. NetApp HCI comes in a 2 RU chassis with 4 node expansion slots.

Minimum configuration is made up of:

- (Two) 2 RU 4-node chassis
- (Four) Storage nodes
- (Two) Compute nodes
- (Two) Open bays for expansion nodes

Once minimum configuration is met, storage and compute nodes and sizes can be mixed and matched.

NetApp HCI is backed by world-class support, with a single point of contact for both hardware and software, and includes 24/7/365 worldwide availability, and 4-hour on-site response for critical system issues.

Detailed specifications of the NetApp HCI Storage and Compute nodes follows.

For more information visit [www.netapp.com](http://www.netapp.com)

### About NetApp

NetApp is the data authority for hybrid cloud. We provide a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with our partners, we empower global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation and optimize their operations. For more information, visit [www.netapp.com](http://www.netapp.com). #DataDriven

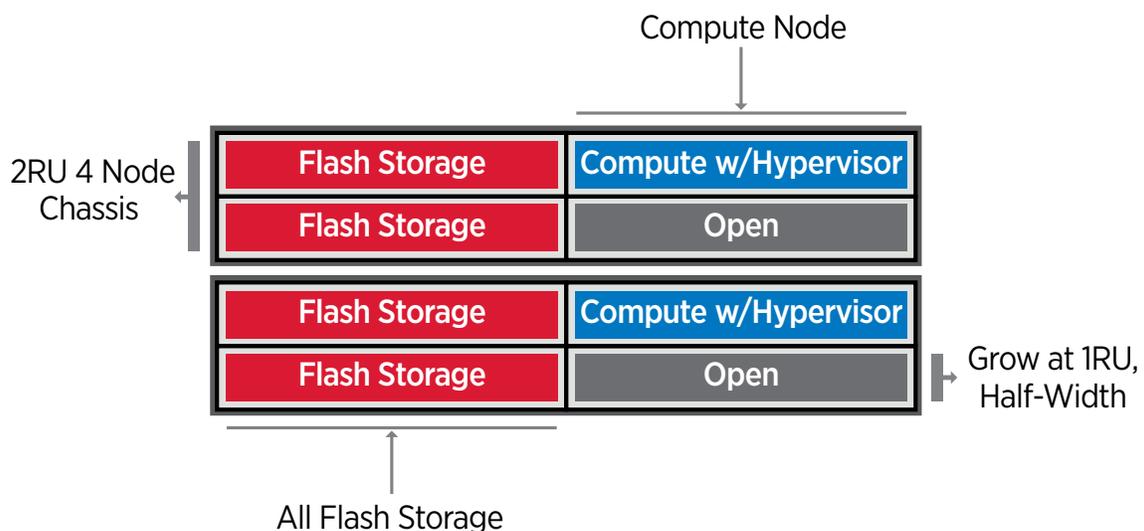


Figure 1) NetApp HCI Minimum Configuration

## NetApp HCI Specifications

### Storage Nodes

	SMALL H300S	MEDIUM H500S	LARGE H700S
SSD	6 x 480 GB	6 x 960 GB	6 x 1.92 TB
Effective Block Capacity*	5.5 TB - 11 TB	11 TB - 22 TB	22 TB - 44 TB
Performance per Node	50,000 IOPS	50,000 IOPS	100,000 IOPS
Storage OS	NetApp SolidFire Element OS 10.0		
Base Networking	2 x 10/25 GbE (SFP 28)** 2 x 1 GbE RJ45 **		
Optional Out-of-Band Management	1 x 1 GbE RJ45		

### Compute Node

	SMALL H300E	MEDIUM H500E	LARGE H700E
CPU	2x Intel E5-2620v4, 8 cores, 2.1 GHz	2x Intel E5-2650v4, 12 cores, 2.2 GHz	2x Intel E5-2695v4, 18 cores, 2.1 GHz
Cores for VM's	16	24	36
Memory	384 GB	512 GB	768 GB
Hypervisor	VMware vSphere 6.0, 6.5		
Base Networking	4 x 10/25 GbE (SFP 28)** 2 x 1GbE RJ45**		
Optional Out-of-Band Management	1 x 1GbE RJ45		

### Power & Dimensions (per Chassis)

Rack Units	2 RU		
Nodes	1 RU, half-width - Mix and match four NetApp HCI nodes per chassis		
Power Input	220-240 V AC 1+1 redundant ***		
Max Watts/Current Per Power Supply	2200 W / 220-240 V / 12-11 A		
Node Physical Dimensions	39.20 mm / 1.54 in H 196.25 mm / 7.73 in W 587.55 mm / 23.13 in D - 3.60 kg / 8.0 lbs		
Chassis Physical Dimensions	8.80 cm / 3.46 in H 44.70 cm / 17.60 in W 73.00 cm / 28.74 in D - 24.70 kg / 54.45 lbs		

### Environmentals

Operating temperature, altitude, and relative humidity	10° C to 35° C (50° F to 95° F); at <= 914.40m (at <= 3,000ft) elevation; 1° C derating per 1,000ft; 8% to 90% relative humidity, noncondensing		
Nonoperating temperature and relative humidity	-40° C to 70° C (-40° F to 158° F)		
Heat Dissipation	Typical BTU/hr — Small 2,730; Medium 3,412; Large 4,129 Worst Case BTU/hr — Small 3,856; Medium 4,982; Large 6,142		
Certifications	FCC, UL, IEC 60950-1, CE, VCCI, KCC, SABS LOA (South Africa), BSMI, SONCAP, KEBS, KSA, TBS, UNGS		

\* NetApp HCI effective capacity calculation accounts for Helix data protection, system overhead, and global efficiencies including compression, deduplication, and thin provisioning. SolidFire customers typically achieve an effective capacity range of 5x to 10x the (usable) capacity, depending on application workloads.

\*\* Cables and transceivers not included

\*\*\* Certain configurations support 100-120 V