



DATA SHEET

HYPERSERIES 3000



The HYPERSeries 3000 is a hyperconverged, hybrid or all-flash infrastructure product with built-in Disaster Recovery capabilities. The product has two components:



1. The primary production appliance



This is where the application and services run under normal circumstances.



2. The secondary DR appliance

This is where the data can be retrieved from or applications restarted in case of a disaster.

1. Primary production unit

	HYPERSeries 3100		HYPERSeries 3200	
Model				
Compute options	Single Intel Xeon - Broadwell CPU: 1. E5-2609V4 [8 cores @ 1.7 GHz] 2. E5-2620V4 [8 cores @ 2.1 GHz] 3. E5-2630V4 [10 cores @ 2.2 GHz]		Dual Intel Xeon - Broadwell CPU: 1. 2 x E5-2609V4 [16 cores @ 1.7 GHz] 2. 2 x E5-2620V4 [16 cores @ 2.1 GHz] 3. 2 x E5-2630V4 [20 cores @ 2.2 GHz]	
Workload ¹	1. E5-2609V4: 8 large or 15 medium or 30 small VMs 2. E5-2620V4: 9 large or 18 medium or 36 small VMs 3. E5-2630V4: 12 large or 24 medium or 48 small VMs		1. E5-2609V4: 16 large or 30 medium or 60 small VMs 2. E5-2620V4: 18 large or 36 medium or 72 small VMs 3. E5-2630V4: 24 large or 48 medium or 96 small VMs	
Capacity options ²	Hybrid 8 or 16TB effective ³ 4 or 8TB net		Hybrid 8 or 16TB effective. ³ 4 or 8TB net	Hybrid² 4/8TB ³ (Hybrid) + 3.2TB ³ (All-flash) 2/4TB + 1.6TB net
	All-flash 9.6TB (SSD) effective ³ 4.8TB net			
Capacity expansion	Up to 2 x Syneto Expansion Shelf (44 bays)		Up to 2 x Syneto Expansion Shelf (44 bays)	
Memory ⁴	96GB (usable by VMs)		224GB (usable by VMs)	
DRAM data cache ⁵	32GB (high speed data read)		32GB (high speed data read)	
Read cache	240GB SSD (read-intensive)		240GB SSD (read-intensive)	N/A
Write acceleration	2 x 100GB SSD (write-intensive)		2 x 100GB SSD (write-intensive)	2 x 200GB SSD
Chassis	2U rack-mountable, 12 bays + 2 OS disks (hot-swap)		2U rack-mountable, 12 bays + 2 OS disks (hot-swap)	
Network connectivity	4 x 1GbE and 1 x 1GbE RJ45 (IPMI) Add-on: Dual-Port 10 GbE, SFP+ or BASE-T (RJ45)		4 x 1GbE and 1 x 1GbE RJ45 (IPMI) Add-on: Dual-Port 10 GbE, SFP+ or BASE-T (RJ45)	
Power	2 x 920 W Redundant		2 x 920 W Redundant	
Dimensions	Height: 89 mm, Width: 437 mm Depth: 648 mm		Height: 89 mm, Width: 437 mm Depth: 648 mm	
Weight	24.95 kg (52 lbs)		24.95 kg (52 lbs)	
AC input	100-240 V, 50-60 Hz, 6-3 Amp		100-240 V, 50-60 Hz, 6-3 Amp	
Cooling	3400 BTU/hour (maximum)		3400 BTU/hour (maximum)	
Temperature	5°C to 35°C (50°F to 95°F)		5°C to 35°C (50°F to 95°F)	
Humidity	8% to 90% (non-condensing)		8% to 90% (non-condensing)	

^{1,2,3,4,5} You can find more information and explanations on the “Definitions” page of this document.

2. Secondary disaster recovery unit

 DR unit - Standard

 DR Unit - Play

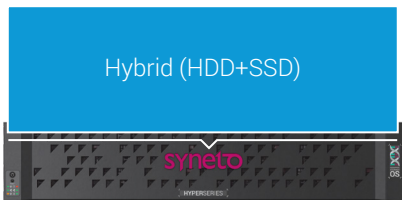


Model		
Compute options	<u>Single Intel Xeon - Broadwell CPU:</u> 1. E5-2609V4 [8 cores @ 1.7 GHz] 2. E5-2620V4 [8 cores @ 2.1 GHz] 3. E5-2630V4 [10 cores @ 2.2 GHz]	<u>Single Intel Atom CPU:</u> 1. Atom C2558 [4 cores @ 2.40 GHz]
Capacity options	Hybrid 8 or 16TB effective 4 or 8TB net	8 or 16TB effective 4 or 8TB net
Memory	54GB (usable by VMs)	Not applicable
DRAM data cache	8GB	8GB
Write acceleration	1 x 100GB SSD (write-intensive)	Not applicable
Chassis	1U rack-mountable, 4 bays + 2 OS disks (hot-swap)	Mini-tower,desktop, 4 bays + 2 OS disks (hot-swap)
Network connectivity	4x 1GbE and 1x 1GbE RJ45 (IPMI)	4x 1GbE and 1x 1GbE RJ45 (IPMI)
Power	2 x 400 W Redundant	1 x 250W Flex ATX
Dimensions	Height: 43 mm, Width: 437 mm Depth: 503 mm	Height: 240 mm, Width: 210 mm Depth: 279 mm
Weight	15,2 kg (33.5 lbs)	6.8 kg (15 lbs)
AC input	100-240 V, 50-60 Hz, 6-3 Amp	100-240 V, 50-60 Hz, 6-3 Amp
Cooling	1500 BTU/hour (maximum)	1000 BTU/hour (maximum)
Temperature	5°C to 35°C (41°F - 95°F)	0°C - 40°C (32°F - 104°F)
Humidity	8% to 90% (non-condensing)	10% to 85% (non-condensing)

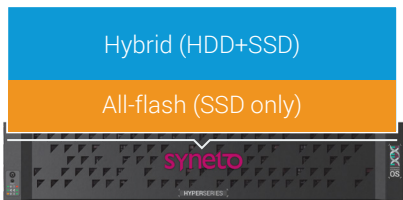
¹ **Workload calculations** in the table above are created according to the industry standard (e.g VMware, Openstack) virtual machine sizing options and best practices. They reflect a global average utilisation for VM compute, storage and memory.

<u>Small Virtual Machines</u>	<u>Medium Virtual Machines</u>	<u>Large Virtual Machines</u>
- CPU: 466 MHz	- CPU: 933 MHz	- CPU: 1866 MHz
- No. of vCPUs: 1	- No. of vCPUs: 2	- No. of vCPUs: 4
- RAM: 2GB	- RAM: 4GB	- RAM: 8GB
- Capacity: 50GB	- Capacity: 105GB	- Capacity: 150GB

² **Capacity Options:** Hybrid and Hybrid² (double-hybrid) refer to the storage capacity of the hyperconverged infrastructure. In particular, they describe the type of storage media and data pool configuration of the product.



The **Hybrid** option contains both regular HDDs as well as SSDs. They are combined into a single data pool which can be used to run typical virtual server workloads like e-mail and domain servers.



The **Hybrid²** option contains an additional, separate all-flash data pool which can be used to run high performance virtual applications like databases and ERP servers.

³ **Effective capacity** across both primary and DR units is calculated by including space saving mechanisms like compression and incremental snapshots. The effective capacities are calculated using an **efficiency rate of 2x** (average for 95% of deployments).

Effective capacity may vary according to the type of data/workload, from low space savings on incompressible workloads/data (e.g: images, videos) to high savings on compressible workloads (e.g: text files, VDI workloads, etc).

⁴ **Memory usable** represents the estimated RAM available to virtual applications.

⁵ **DRAM data cache** represents the overall DRAM memory available to cache frequently and most recently used data to provide fast access. This can be compared the traditional the 4/8GB cache.