Lenovo ThinkAgile HX Series Specifications Comparison

Reference Information

Lenovo ThinkAgile HX Series appliances are designed to help you simplify IT infrastructure, reduce costs, and accelerate time to value. These hyperconverged appliances from Lenovo combine industry-leading hyperconvergence software from Nutanix with Lenovo enterprise platforms.

The ThinkAgile HX Series appliances deliver the industry's most feature-rich hyperconverged infrastructure to enterprise datacenters. Nutanix brings the benefits of web-scale technologies to enterprise applications through enterprise storage, data protection, infrastructure resilience, management and analytics, and security.

The ThinkAgile HX Series appliances are built on industry-leading Lenovo ThinkSystem servers that feature enterprise-class reliability, management, and security.

The ThinkAgile HX1320 appliance is engineered for light to medium workloads (business applications and VDI) and optimized for remote office and branch office (ROBO) environments.

The ThinkAgile HX Series appliances for compute-heavy workloads include the HX3320 1U rack-mount, HX3520-G 2U rack-mount, and HX3720 2U 4-node (2U4N) rack-mount appliances. Several common uses for the ThinkAgile HX Series appliances for compute-heavy workloads include virtual desktop infrastructure (VDI), server virtualization, private/hybrid clouds, enterprise applications, light databases, and remote office and branch office workloads.

The ThinkAgile HX5520 is a 2U rack-mount appliance that is optimized for storage-heavy workloads, including file servers, on-cluster backups, and big data.

The ThinkAgile HX7520 (2U rack-mount) and HX7820 (4U rack-mount) appliances are optimized for high-performance workloads, including databases, e-mail and collaboration, and workload-balancing clusters.

The ThinkAgile HX Series appliances can be configured with a three- or five-year hardware warranty with 24x7 ThinkAgile Advantage Single Point of Support (Lenovo appliance hardware and Nutanix software) and various levels of coverage with a well-defined scope of services, including service hours, response time, term of service, and service agreement terms and conditions.

Specifications comparison

The following table compares specifications of the ThinkAgile HX Series nodes that feature the second generation of the Intel Xeon Processor Scalable Family.

Table 1. HX Series specifications comparison

Attribute	Specification							
Appliance	HX1320	HX2320	HX3320	HX3520-G	HX3720	HX5520	HX7520	HX7820
Certified node	HX1321	HX2321	HX3321	HX3521-G	HX3721	HX5521	HX7521	HX7821
Workload type	ROBO	General purpose	Compute-heavy	GPU compute-heavy	Compute-heavy	Storage-heavy	High performance	
Form factor	1U	1U	1U	2U	2U4N	2U	2U	4U
Minimum number of nodes	1	3	3	3	3	3	3	3
Minimum AOS version	5.11	5.11	5.11	5.11	5.11	5.11	5.11	5.11
VM hosting	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Xeon SP Gen 2 processor type	Silver, Gold	Silver, Gold	Silver, Gold, Platinum	Silver, Gold, Platinum	Silver, Gold, Platinum	Silver, Gold, Platinum	Gold, Platinum	Gold, Platinum
Processor quantity	1	2	2	2	2	2	2	4
Max memory capacity	384 GB	1.5 TB	3 TB	1.5 TB	768 GB	3 TB	3 TB	6 TB
Storage controller	1x 430-8i	1x 430-8i	1x 430-16i	1x 430-16i	1x 430-8i	1x 430-16i	3x 430-8i	2x 430-16i
Drive bays	4x LFF	4x LFF	10/12x SFF	16x SFF	6x SFF	12/14x LFF	16/24x SFF	24x SFF
HDD quantity (hybrid storage)	2	2	4-10	6-14	4	4-12	12-20	4-20
SSD quantity (hybrid storage)	2	2	2-4	2-4	2	2-4	4-8	2-8
SSD quantity (all flash storage)	2-4	2-4	2-12	4-16	2-6	4-14	4-24	4-24
Hybrid storage capacity (max)	24 TB	24 TB	24 TB	33.6 TB	9.6 TB	120 TB	48 TB	48 TB
All flash storage capacity (max)	15.36 TB	15.36 TB	46.08 TB	61.44 TB	23.04 TB	53.76 TB	92 TB	92 TB
Network ports (max)*	8	10	10	10	4	12	12	12
GPU adapters (max)	None	None	None	2x M10/M60/P40 2x V100 FHFL 3x V100 FHHL 5x T4	None	None	None	None
Power supplies	2x 550W 2x 750W	2x 550W 2x 750W 2x 1100W	2x 750W 2x 1100W	2x 1600W	2x 2000W#	2x 750W 2x 1100W	2x 1100W	4x 1600W 4x 2000W
Hypervisors	AHV, ESXi, Hyper-V	AHV, ESXi, Hyper-V	AHV, ESXi, Hyper-V	AHV, ESXi, Hyper-V	AHV, ESXi, Hyper-V	AHV, ESXi, Hyper-V	AHV, ESXi, Hyper-V	AHV, ESXi, Hyper-V
Hypervisor boot drive	2x M.2 SSDs	2x M.2 SSDs	2x M.2 SSDs	2x M.2 SSDs	2x M.2 SSDs	2x M.2 SSDs	2x M.2 SSDs	2x M.2 SSDs
Appliance product guide	LP1119	LP1120	LP1121	LP1122	LP1123	LP1124	LP1125	LP1126
Certified node product guide	LP1127	LP1128	LP1129	LP1130	LP1131	LP1132	LP1133	LP1134

* The maximum number of network ports includes a supported combination of 1/10 GbE RJ-45 ports, 10 GbE SFP+ ports, and 25 GbE SFP28 ports (refer to the product guide for details).

Related publications and links

For more information, see these resources:

- Lenovo ThinkAgile HX Series
  http://www3.lenovo.com/us/en/p/WMD00000326
- Lenovo Data Center Solution Configurator (DCSC):
  http://dcsc.lenovo.com
- Nutanix documentation
  http://portal.nutanix.com/#/page/docs
- Lenovo ThinkAgile HX Series Best Recipes
  http://datacentersupport.lenovo.com/us/en/solutions/ht505413
- Lenovo Data Center Support
  http://datacentersupport.lenovo.com
- Lenovo Converged HX Series TCO Calculator
  http://lenovo-hx.esgcalculator.com
- Lenovo Hyperconverged Decision Tool
  http://www.lenovo.com/hxdecisiontool

Related product families

Product families related to this document are the following:

- ThinkAgile HX Series for Nutanix
- Nutanix Alliance
- Hyperconverged Infrastructure
- Hyperconverged Infrastructure

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This document, LP0873, was created or updated on August 26, 2019.

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