

Storage Appliance

DATASHEET



SA Value Proposition

StarWind SA helps organizations with fixed compute platforms meet storage performance and capacity growth requirements by providing them with high-performance and simply scalable storage fully covered by 24/7 support. StarWind Storage Appliance easily handles high-performance or unpredictable data growth. It serves storage as a single namespace to different environments via multiple uplink protocols: iSCSI, SMB3, NFS, including RDMA-capable iSER and SMB Direct.

Additionally, the appliance features an optional gateway to Azure public cloud, which helps to implement an effective Disaster Recovery plan or meet regulatory requirements. StarWind SA scales up by adding individual disks and flash modules or JBODs, while adding ready controller nodes provides simple scale-out growth as required.

Performance and Features



- Performance without limitations: more than 0.5M IOPS from a single LUN or share
- Multiprotocol support: iSCSI with iSER and VVOLs, NFSv4, SMB3 & SMB Direct, NVMe (soon)
- Fault tolerance: dual controller, dual disk set design elevates storage uptime far beyond HA

Simplicity of Use



- Ships fully preconfigured to your needs: setup time is under 1 hour incl. equipment racking
- Multi-hypervisor, multi-workload support without additional tuning
- 24/7/365 1 hour support SLA: we guarantee our engineer is remoted in less than 60 minutes

Low Cost



- Commodity Hardware Economics: pure x86, no highly-priced proprietary componentry used
- Thoroughly selected components: just the right amounts of CPU cores, RAM, and storage
- BYOL policy: re-use your existing software & hypervisor licenses, no need to re-purchase

Anchor Brewing Implements StarWind as a Storage Solution for Virtual Desktop Infrastructure (VDI)



"The stability has never been an issue, not even a single hiccup. This is a product I would highly recommend especially in the SMB market where budgets are always tighter and utilizing hardware for multiple purposes makes the management very happy."

Daniel Covell, IT Consultant of Anchor Brewing Company, Founder and President of The Covell Group LLC

Model Description

SA-1H – Single-chassis, dual controller, single disk pool hybrid array. Designed for consolidating small (From 4 TB) to medium (Up to 44 TB) amounts of warm secondary infrequently accessed data. Provides balanced performance while maintaining economics of a disk-only solution. Two storage controllers provide rapid failover and guarantee HA storage access. Use cases: secondary media and virtualization storage, medical records, primary backup storage with low RPO/RTO requirements.

SA-2H & SA-2AF – Redundant-chassis, dual controller, redundant disk pool array family. Designed for consolidating small (From 4 TB) to large (500+ TB) amounts of hot primary data. Dual storage controllers with independent disk sets can be physically separated up to 650 feet from each other to deliver enclosure, rack, and even site-aware storage Fault Tolerance.

SA-2H – hybrid appliance optimized for high performance, low latency data processing for applications with a defined data set. Use cases: primary virtualization and media storage, medical records, small database storage.

SA-2AF – All-Flash version of the appliance optimized for uncompromised high performance across entire storage capacity for most demanding applications. Use cases: Databases, Big Data and primary virtualization storage.

Model	SA-1H	SA-2H	SA-2AF	Maximum Scale-Out SA-2AF Cluster
Raw Capacity, TB	4 - 55.3	4 - 110.6	3.2 - 169.6	530.9 TB
Usable Capacity, TB	3 - 49.5	2 - 99	1.2 - 157	501.8 TB
RAID	1, 10, 5, 6	1, 10, 5, 6; 101, 51, 61		-
RAM Cache, per controller	16 GB RAM	1 GB NVRAM + 32 GB RAM		3 GB NVRAM 96 GB RAM
Flash Cache, per controller	400 GB - 4.8 TB SSD-based	4.8 TB SSD-based	Up to 4 TB NVMe-based	12 TB NVMe-based
Networking	4x 1 GbE, 4x 10 GbE	2x1 GbE + 2x10 GbE	4x1 GbE + 4x10 GbE 4x 50/100 GbE	6x1 GbE + 6x10 GbE 6x 50/100 GbE
Private Connectivity	-	4x 10 Gb RDMA	4x 50/100 Gb RDMA	6x100 Gb RDMA
Operating Protocols	iSCSI, SMB3, SMB Direct, NFSv4.1	iSCSI, iSER, SMB3, SMB Direct, NFSv4.1, WWLs		
Deduplication	Offline 32K only	In-Line 4K, Offline 32K		
Compression	Yes			
Maximum Expansion Shelves	-	1		-
Scaling Increment, Nodes	-	1		-
Supported client OS & Hypervisor	VMware vSphere 5.0 - 6.5 (NFS, iSCSI, iSER, WWLs) Microsoft Hyper-V 2008 R2 - 2016 (iSCSI, SMB3, SMB Direct) Microsoft Windows Server 2008 R2 - 2016 (iSCSI, SMB3, SMB Direct) XenServer 6.5 (SMB3, iSCSI, iSER*)			

* - XenServer experimental feature

Expansion shelf	H-24	AF-24	Model	Dimensions	Weight max.
Raw Capacity, TB	4 - 48 NL-SAS	1.2 - 92.16 Flash	SA-2H, SA-2AF	2 RU, 8.73 cm (3.44") x 44.40 cm (17.49") x 68.40 cm (26.92")	34.5 kg (76.05 lb)
Usable Capacity, TB	2 - 46	0.4 - 88.32	H-24, AF-24	2 RU, 8.7 cm (3.39") x 48.2 cm (18.8") x 54.1 cm (29.1")	24.2 kg (53.35 lb)



Contact us to learn which StarWind SA model fits your business best!