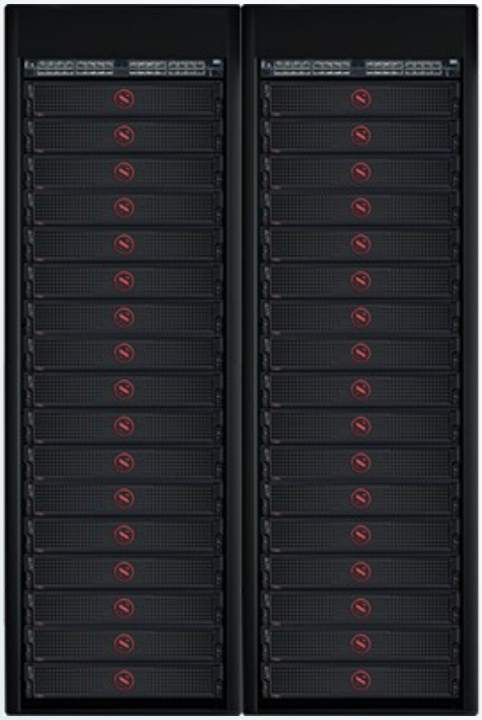
NGX STORAGE HYBRID SERIES



Hybrid series are highly scalable and cache centric products for enterprises. This product family designed for various workloads to enable virtualization, data warehousing, business intelligence, big data and database operations.

- Eliminate storage silos.
- Scale both in performance and capacity.
- Simplify management.
- Reduce costs and complexity.

NGX-H Datasheet // GEN2 Systems

Table 1) NGX Hybrid GEN2 Series Technical Specifications

	H1000	H1200	H1400	H1600	H1800
Maximum raw capacity	1.1PB	2PB	3.1PB	5.2PB	7.8PB
Maximum drives	144	200	250	380	500
Max DRAM Cache	192GB	256GB	384GB	2048GB	3096GB
Max Flash Cache	20TB	40TB	40TB	100TB	200TB
Controller form factor	2U	2U	2U	2U	2U
Supported drive types	SAS(10K,15K), NL-SAS(7.2K), SSD, FC	SAS(10K,15K), NL-SAS(7.2K), SSD, FC	SAS(10K,15K), NL-SAS(7.2K), SSD, FC	SAS(10K,15K), NL-SAS(7.2K), SSD, NVMe, FC	SAS(10K,15K), NL-SAS(7.2K), SSD, NVMe, FC
Fibre Channel	Up to 32Gb/s	Up to 32Gb/s	Up to 32Gb/s	Up to 64Gb/s	Up to 64Gb/s
Ethernet [1]	Up to 100Gb/s	Up to 100Gb/s	Up to 100Gb/s	Up to 100Gb/s	Up to 100Gb/s
SAS Backend	SAS 3.0 / 4.0	SAS 3.0 / 4.0	SAS 3.0 / 4.0	SAS 3.0 / 4.0	SAS 3.0 / 4.0
Supported RAID Levels	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror
Max Hosts	1024	1024	1024	2048	2048
Max number of LUNs	1000	1200	1500	2000	4000
Max number of Share	1000	1200	1500	2000	4000
Max LUN size	1024TB	1024TB	1024TB	2048TB	4096TB
Max Share size	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Max Snapshots	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Max Clone	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Max Replica Profile	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

1. 10/25/40/100G adapters have TCP Offload Engine.

Table 2) NGX Hybrid GEN2 Series Technical Specifications

	H2000	H2400	H2600	H2800
Maximum raw capacity	20PB	26PB	34PB	38PB
Maximum drives	1024	2040	2040	2160
Max DRAM Cache	1024GB	2048GB	4096GB	8192GB
Max Flash Cache	80TB	120TB	120TB	200TB
Controller form factor	4U	4U	4U	4U
Supported drive types	SAS(10K,15K), NL-SAS(7.2K), SSD, NVMe, FC	SAS(10K,15K), NL-SAS(7.2K), SSD, NVMe, FC	SAS(10K,15K), NL-SAS(7.2K), SSD, NVMe, FC	SAS(10K,15K), NL-SAS(7.2K), SSD, NVMe, FC
Fibre Channel	Up to 64Gb/s	Up to 64Gb/s	Up to 64Gb/s	Up to 64Gb/s
Ethernet [1]	Up to 100Gb/s	Up to 100Gb/s	Up to 100Gb/s	Up to 100Gb/s
SAS Backend	SAS 3.0 / 4.0	SAS 3.0 / 4.0	SAS 3.0 / 4.0	SAS 3.0 / 4.0
Supported RAID Levels	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror	0, 1, 10, 5, 6, 50, 60, RAID-TP, TP-Mirror, 4way Mirror
Max Hosts	8192	8192	8192	Unlimited
Max number of LUNs	65536	65536	65536	Unlimited
Max number of Share	65536	65536	65536	Unlimited
Max LUN size	8192TB	8192TB	16384TB	Unlimited
Max Share size	Unlimited	Unlimited	Unlimited	Unlimited
Max Snapshots	Unlimited	Unlimited	Unlimited	Unlimited
Max Clone	Unlimited	Unlimited	Unlimited	Unlimited
Max Replica Profile	Unlimited	Unlimited	Unlimited	Unlimited

1. 10/25/40/100G adapters have TCP Offload Engine.

Table 3) NGX Hybrid GEN2 Series Software Specifications

High Availability Features	• Active-Active Dual Controller • Redundant hot swap disk drives, power supplies and fans • Self-Healing array, Intelligent and Auto Data Rebuild Technology • Non-disruptive software and firmware upgrades • Non-disruptive Disk Pool Expansion • Non-disruptive Volume and Share Expansion • Multipath technology
Supported Operating Systems and Hypervisors	Windows Server 2016, Windows Server 2019, Windows Server 2022, Linux® (Pardus, RedHat, SuSE, Centos, Debian, Ubuntu, Oracle), UNIX, Oracle® Solaris, AIX, HP-UX, Mac® OS, FreeBSD, NetBSD, VMware®, Hyper-V, Citrix
Virtualization API Integration	• VMware VAAI • Microsoft ODX • OpenStack Cinder and Manila • Kubernetes CSI • OpenShift
Storage Protocols	Fibre Channel, iSCSI, NFSv3, NFSv4, SMB3/CIFS, Object S3
Storage Efficiency	• Federated Pools (mixed SAS, SSD, NVMe) • Inline Compression, Deduplication, Zero Detection, UNAMP/TRIM, Copy Reduction • Adaptive Flash Cache, Auto Cache Tiering, Data Tiering • Thin Provisioning, Thin Snapshot, Thin Clone • Quality of Service and Application Priority • Quota and Space Reservation
Data Protection	• Instant Snapshots, Scheduled Snapshots, Instant Clones • MetroScale Cluster, business continuity and disaster recovery • Syncronous Remote Replication • Async Remote Replication • Cloud Backup and Cloud Restore (Amazon S3, Google Cloud, OpenStack Swift)
Data Management	• Responsive Web GUI • HTTP(S) RESTful API • Multi-Factor Authentication • SNMPv2/v3 • SNMP Trap • E-Mail Alerts • AI and ML driven predictive analytics • Cloud based proactive support and system monitoring
NAS Features / Plugins	• Scale-out-NAS, up to 70PB single namespace • Cluster Aggregated Pool • Active Directory and LDAP Integration • CIFS/SMB File Version Control • WORM • Veritas DataInsight Plugin • Object access over NAS
Security and compliance	• Software encrypted data pools • Self Encrypted Drives • EN 60950-1, CISPR 22/CISPR 24 and EN 55022/55024