





HyperDrive

Zero-Risk Enterprise Storage that Runs at Wire Speed

Enterprises have limited choices when it comes to acquiring new storage: they can sign a contract with a traditional storage vendor and spend lots of money on a proprietary solution that isn't interoperable, or they can build-their-own solution using a software-defined storage (SDS) platform and commodity hardware, which is much less expensive, but more error-prone and tougher to support. Neither choice is ideal. HyperDrive is a completely new approach: it's a Ceph appliance that is specifically optimized for enterprise storage. The result is a zero-risk value proposition including:

-  A "designed, not assembled" solution specifically architected and optimized for storage
-  Freedom from storage-vendor hardware and software lock-in
-  Option to eliminate up-front capital costs with pay as you go subscription
-  Interoperability with other Ceph solutions in your data center

Features at a glance

Hardware

Scale-out ready

Wire speed throughput performance

Solid state disks (SSD) for journals

Supports front-side and back-side networking

Preconfigured for balanced read and write performance

Storage Management

Configurable cluster-level resiliency

Health monitoring

Ceph

Compatible with clusters running Ceph v10.2 (Jewel release)

Native support for OpenStack and Kubernetes

Interfaces for file, block, and object storage



Value HyperDrive 48 TB Storage Node (HD01048)

Eliminating the Traditional Limitations of Storage

The SoftIron HyperDrive platform of enterprise storage appliances is ideal for software defined storage deployments. HyperDrive is an easy-to-deploy system specifically architected for Ceph and optimized at every level of the technology stack. SoftIron's engineers have completely re-thought the limitations of traditional storage and re-designed it to deliver the very best performance and density. HyperDrive also delivers a new level of storage economics that drastically reduce the acquisition and operating cost for storage pools of any size.

Enterprise Data Center Scale Out

The modern data center requires software defined storage that is dense, performant, economical, and agile. HyperDrive is built in atomic network units paired with storage that easily and automatically scale from small to very large deployments. Adding additional storage is as easy as connecting the network and power cables on the HyperDrive storage appliance.

Performance and Agility at Wire Speed

The software defined data center must move beyond application/ storage silos to offer a new virtual data store that is accessible to all applications. To accomplish this, it's important that the distributed storage pool have plenty of performance to simultaneously handle storage requests from many applications. All SoftIron HyperDrive products are engineered to operate at wire speed. HyperDrive, backed by object storage at its core, increases overall data store performance as additional storage nodes are added. This feature allows many machines to attach to the distributed storage pool without compromising the performance required by the applications.

The HyperDrive storage portfolio is built to work together seamlessly. You can bring additional storage capacity online by connecting a new HyperDrive to the storage pool and running a simple set of commands confirming the newly added capacity. Data resilience and physical location are configurable and self-managing.

Density and Economics

Your enterprise data center is likely facing a common dilemma: you need massive storage growth but you're constrained by available floor space. It's important that new storage pools fit into the smallest possible footprint. HyperDrive delivers the best combination of density, performance, and value. SoftIron HyperDrive can reduce your storage costs without giving up wire speed throughput.

Product Specifications

Raw Storage Capacity	48 TB
Drive Configuration	8 x 6 TB SATA HDD Data 2 x SATA SSD System
Random Read Throughput	Wire Speed
IO Options	10 GbE
Data Resiliency	Configurable Erasure Coding / Replication
Supported Storage Type & Protocols	Object <ul style="list-style-type: none">LIBRADOS (native)S3, S3 Analytics (S3A) and OpenStack Swift (via RGW / gateway) Block <ul style="list-style-type: none">RBD (native)iSCSIOpenStack Cinder File (CephFS — POSIX compliant) <ul style="list-style-type: none">NFS / CIFSFUSEOpenStack ManillaHDFS (Hadoop)
Storage Management Port	1 GbE IPMI SoftIron Storage Controller
Power Supply	400W 100v-240v 50Hz-60Hz
Power Consumption	~ 100W under load
Form Factor	1U Rack Mount
Dimensions	H 43.7 mm / 1.72 inches W 429 mm / 16.9 inches L 637 mm / 25.1 inches
Weight	16.3 kg / 36 pounds

Take HyperDrive for a Test Drive

Try out a HyperDrive cluster in your environment for 90 days – no long term commitment necessary.

softiron.com/testdrive



Density HyperDrive 120 TB Storage Node (HD11120)

Eliminating the Traditional Limitations of Storage

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Product Specifications

Raw Storage Capacity	120 TB
Drive Configuration	12 x 10 TB SATA HDD Data 2 x SATA SSD System
Random Read Throughput	Wire Speed
IO Options	25 / 10 GbE
Data Resiliency	Configurable Erasure Coding / Replication
Supported Storage Type & Protocols	Object <ul style="list-style-type: none">• LIBRADOS (native)• S3, S3 Analytics (S3A) and OpenStack Swift (via RGW / gateway) Block <ul style="list-style-type: none">• RBD (native)• iSCSI• OpenStack Cinder File (CephFS – POSIX compliant) <ul style="list-style-type: none">• NFS / CIFS• FUSE• OpenStack Manilla• HDFS (Hadoop)
Storage Management Port	1 GbE IPMI SoftIron Storage Controller
Power Supply	Dual Redundant 850W 100v-240v 50Hz-60Hz
Power Consumption	~ 100W under load
Form Factor	1U Rack Mount
Dimensions	H 43.7 mm / 1.72 inches W 429 mm / 16.9 inches L 875 mm / 34.5 inches

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Performance HyperDrive 56 TB All-Flash Storage Node (HD31056)

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SoftIron® makes the world's finest solutions for the data center. The company's HyperDrive™ software defined storage portfolio is built on Ceph and runs at wire speed, while Hypercast™ delivers the best density and value for real-time video streaming. SoftIron unlocks greater business value for enterprises by delivering great products without software and hardware lock-in. Learn more at softiron.com.

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Product Specifications

Raw Storage Capacity	56 TB
Drive Configuration	14 x 4 TB SATA SSD Data
Random Read Throughput	Wire Speed
IO Options	25 / 10 GbE
Data Resiliency	Configurable Erasure Coding / Replication
Supported Storage Type & Protocols	Object <ul style="list-style-type: none">LIBRADOS (native)S3, S3 Analytics (S3A) and OpenStack Swift (via RGW / gateway) Block <ul style="list-style-type: none">RBD (native)iSCSIOpenStack Cinder File (CephFS – POSIX compliant) <ul style="list-style-type: none">NFS / CIFSFUSEOpenStack ManillaHDFS (Hadoop)
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