NGX HyperIO Scale-Out Object Storage delivers enterprise-grade, high-density object storage engineered for rapid data growth and mission-critical workloads. Built as a fully integrated hardware platform, the appliance combines optimized compute, networking, and storage in a modular scale-out architecture. Each node arrives pre-configured, rack-ready, and performance-tuned ensuring predictable behavior, consistent performance, and simplified deployment across data center and edge environments.

Designed for AI/ML repositories, backup archives, multimedia content, and large-scale unstructured datasets, **NGX HyperIO** offers massive scalability, multi-site protection, and industry-leading durability through a tightly coupled hardware + software stack.

Linear, Non-Disruptive Scalability

Add node as needed capacity, throughput, and object count scale linearly with no downtime or service interruption.

High Availability by Design

Redundant power, networking, and internal components ensure continuous operation. Cluster-level erasure coding and replication protects against drive, node, or site failures.

Optimized for Data-Intensive Workloads

High-bandwidth networking, NVMe metadata acceleration, and parallel I/O paths deliver consistent performance for demanding workloads.

Maximum Node	Up to 255
Supported Drives	NVMe, SCM, SAS
ECC Memory (per node)	Up to 2048 GB
Host I/O Ports	10G,25G,40G,50G,100G
Backend Networking	25G,40G,50G,100G,200G
High Availability Features	• No single point of failure. • Redundant hot swap disk drives, power supplies and fans • Self-Healing, Intelligent and Auto Data Rebuild Technology
Data Protection	EC and Replicated copies
Alert – Monitoring Protocols	Responsive Web UI, SNMP (v2/v3), SNMP Trap, E-Mail, Cloud Monitoring
S3 Connection (per node)	1024
Maximum Bucket	Unlimited
Maximum Bucket Size	Unlimited
Maximum Object Size	16TiB
Security	HTTPS, AES256
S3 Table Support	Apache Iceberg
Data Reduction	Compression
Technical Highlights	Hardware Architecture • High-density appliance nodes (24–60 drive configurations) • Hot-swappable drives and power supplies • Up to 200GbE connectivity options • SSD/NVMe tier for metadata or performance hot tier • Designed for high-availability racks and multi-rack clusters Cluster & Data Services • Scale-out cluster • Distributed metadata services for fast indexing and object lookup • Automatic load balancing and self-healing across nodes • Bucket-level policies and multi-site replication Durability & Protection • Erasure coding and replication copy • Geo-dispersed data protection • Continuous background integrity checks and automated rebuilds Performance • Parallel object I/O across all cluster nodes • Multi-stream ingest optimized for large objects and high-concurrency workloads • High-throughput architecture ideal for analytics, backup, and streaming media • Excellent performance for both small and large files • Supercharge data lake analytics by up to 10x with native S3 Tables, combining the massive scale of object storage with structured, SQL-like data management for lightning-fast queries.
Regulatory and Compliance	EN 60950-1, CISPR 22/CISPR 24 and EN 55022/55024

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