



# Isilon IQ S-Series

Accelerate performance for highly-transactional, IOPS-intensive applications

## Key Features

- Over 1.7 million IOPS with aggregate throughput of over 45 GBps
- Up to 2.3 TB of globally coherent cache
- Single file system and global namespace
- Namespace Operation Acceleration via SSD
- 60-second on-the-fly scaling of capacity and performance
- Up to N+4 data protection, set at cluster, directory, or file level

## Use Cases

The Isilon S-Series is a high-performance enterprise solution, fit for a variety of applications and workflows, including:

- **Digital Media:** broadcast, real-time streaming, rendering, and post production
- **Design & Simulation:** simulation, verification, and analysis of electronic and mechanical systems, design for manufacturability, and analysis requiring fast scratch storage

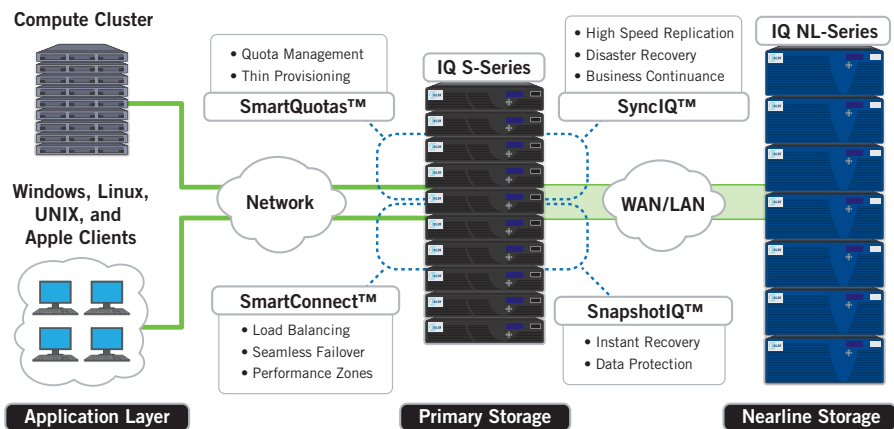
When ultimate IOPS performance is mission-critical, the Isilon IQ S-Series delivers. The Isilon IQ S-Series product line—built on Isilon’s proven scale-out storage technology—accelerates business and increases speed-to-market by providing ultra-fast primary storage for your mission-critical, highly transactional, and random access file-based applications.

**Performance:** The Isilon S-Series surpasses the limits of traditional primary file storage, providing over 1.7 million IOPS, which is 30 times more than the leading Fibre Channel NAS solution, and 45 gigabytes per second (GBps) of aggregate throughput, all from a single file system. To accomplish these extraordinary speeds, the S-Series combines the power of enterprise-class 15,000 RPM Serial Attached SCSI (SAS) drive technology, Quad-GbE front-end networking, dual quad-core Intel CPUs, a high-performance InfiniBand back-end, and up to 2.3 TB of globally coherent cache. In addition, with SSD technology for file-system metadata, the Isilon S-Series delivers additional performance gains for metadata intensive operations while improving overall latency.

**Simplicity:** The S-Series, built on the same principles of simplicity as all Isilon products, provides ultimate ease of use. You can install, configure and have an Isilon S-Series cluster online in under 10 minutes, without the need for expensive, specialized integration and configuration services.

**Economics:** With its impressive performance benchmarks, the Isilon S-Series affords the best dollar per I/O solution available—a full thirty percent better than other enterprise storage solutions. And, with the proven high-utilization factor of Isilon scale-out storage—over 80 percent versus 50 percent for traditional NAS and SAN—overall storage efficiency is significantly improved while initial acquisition costs are greatly reduced.

### Isilon IQ S-Series Scale-out Storage Architecture: Exceptional performance for highly transactional and random access file-based applications



# Isilon S-Series Product Specifications

## Product Attributes

|                                      |  |
|--------------------------------------|--|
| <b>Scale-out Architecture</b>        | Truly distributed, fully symmetric clustered architecture that combines modular storage nodes with Isilon's intelligent software.  |
| <b>Modular Design</b>                | Self-contained nodes include server, software, and disks in a 2U rack-mountable node.  |
| <b>Operating System</b>              | Sixth generation of Isilon® OneFS® distributed file system. Creates a cluster with a single file system and single global namespace. Fully journaled, fully distributed, globally coherent write/read cache. |
| <b>High Availability</b>             | No single point of failure. Self-healing design protects against disk or node failure. Includes backend intra-cluster failover.  |
| <b>Scalability</b>                   | Initial cluster setup in under 10 minutes. Add performance and capacity in 60 seconds. Up to 778 TB and 45 GBps throughput.  |
| <b>Protection Levels</b>             | FlexProtect file-level striping with support for N+1 through N+4 and mirroring data protection schemes.  |
| <b>Protocol Support</b>              | NFS v3 (UDP or TCP), CIFS, HTTP, FTP, NDMP, SNMP, LDAP, ADS, NIS reads/writes.   |
| <b>Client Support</b>                | Microsoft® Windows®, Linux, UNIX, Apple® Macintosh.  |
| <b>Isilon Software Compatibility</b> | Compatible with all Isilon licensable software: SyncIQ™, SnapshotIQ™, SmartConnect™, SmartQuotas™, SmartPools™, InsightIQ™ and Aspera for Isilon IQ.   |

## Environmental Specifications

|                                   |   |
|-----------------------------------|---|
| <b>Power Supply</b>               | Dual redundant, hot-swappable 650W power supplies with Power Factor Correction (PFC)                |
| <b>Operating Environment</b>      | 50° F to 95° F (10° C to 35° C), 5% to 95% relative humidity, non-condensing                        |
| <b>Dimension/Weight</b>           | Height: 3.48" (8.8 cm), Width: 18.87" (47.9 cm), Depth: 28.5" (72.4 cm), Weight: 58.2 lbs / 26.4 kg |
| <b>Minimum Service Clearances</b> | Front: 35" (88.9 cm), Rear: 14" (35.6 cm)   |

| Isilon IQ Node Attributes               | 5400S  | 5000S-SSD  |
|---|--|--|
| <b>Capacity</b>                         | 5.4 TB   | 5.05 TB  |
| <b>Hard Drives (3.5" SAS)</b>           | Twelve (12) 450 GB                                     | Eleven (11) 450 GB                               |
| <b>Solid State Drives (SLC)</b>         | N/A  | One (1) 100 GB                                   |
| <b>ECC Memory (FBDiMM Cache)</b>        | 16 GB  |  |
| <b>CPU Type</b>                         | Dual 2.33 GHz Quad core Intel Xeon processors per node |  |
| <b>Front-end Networking</b>             | 4 copper 1000 Base-T (GigE) per node                   | 4 x GigE OR 2 x GigE & 2 x 10GE (SFP+ or Copper) |
| <b>Infrastructure Networking</b>        | 2 InfiniBand connections                               |  |
| <b>Typical Power Consumption @ 100v</b> | 4.0A   |  |
| <b>Typical Power Consumption @ 240v</b> | 1.7A   |  |
| <b>Typical Thermal Rating</b>           | 1,370 BTU/hr   |  |
| <b>Non-volatile RAM (NVRAM)</b>         | 512 MB   |  |

| Isilon IQ Cluster Attributes | 5400S          | 5000S-SSD         |
|------------------------------|----------------|-------------------|
| <b>Number of Nodes</b>       | 3-144          |                   |
| <b>Capacity</b>              | 16.2 TB-778 TB | 15.15 TB-727.2 TB |
| <b>MBps</b>                  | 960-46,080     |                   |
| <b>Memory</b>                | 48 GB-2,304 GB |                   |

## Isilon's Comprehensive Storage Solutions... Powerful, Yet Simple

The Isilon IQ S-Series product line, along with the Isilon IQ X-Series and NL-Series product lines, provide a complete portfolio of innovative solutions that drive business value for customers by optimizing their mission-critical applications, workflows, and processes. Isilon enables enterprises and research organizations worldwide to manage large and rapidly growing amounts of data in a highly scalable, easy-to-manage, and cost-effective way.

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