

# ISILON S-SERIES



The Dell EMC Isilon S-Series scale-out NAS platform, powered by the OneFS<sup>®</sup> operating system, uses a highly versatile yet simple scale-out storage architecture to speed access to massive amounts of unstructured data, while dramatically reducing cost and complexity. The Isilon S-Series includes the Isilon S210 product line, a high-performance 2U platform that provides ultrafast primary storage for your file-based applications.

**Performance:** The Isilon S210 provides over 3.0M IOPS and 175GB/s of aggregate throughput per cluster. To accomplish these extraordinary speeds, the S210 utilizes high-performance solid-state drive (SSD) and 10,000 RPM 2.5-inch Serial Attached SCSI (SAS) drive technology, a choice of dual 1GbE and dual 10GbE or dual 1GbE and dual 40GbE front-end networking, a high-performance InfiniBand back-end, and over 700 terabytes (TB) of globally coherent cache in a single cluster.

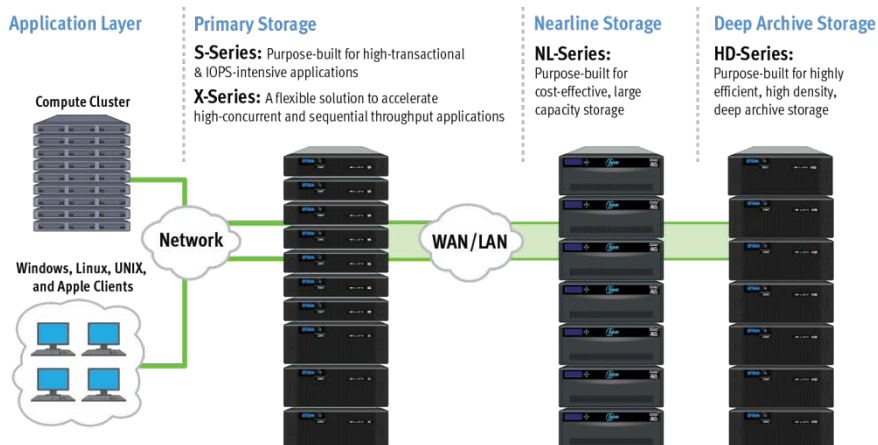
**Simplicity:** You can install, configure, and have an Isilon S-Series cluster online in less than 10 minutes. When needed, you can add a node to scale performance and capacity in about a minute.

**Efficiency:** Isilon scale-out storage is highly efficient and delivers over 80 percent storage utilization versus about 50 percent for traditional platforms. Isilon SmartDedupe<sup>™</sup> data deduplication software further enhances storage efficiency to reduce your physical storage requirements and associated costs. With its impressive performance benchmarks and resulting low cost per IOP, the Isilon S-Series offers unmatched value for a performance platform.

**Security:** With optional FIPS 140-2 level 2 self-encrypting drives, the Isilon S210 allows you to meet regulatory and compliance needs for securing data at rest without sacrificing performance or usability.

## Specifications

### ARCHITECTURE



## ISILON S-SERIES NODE SPECIFICATIONS

ISILON S210 NODE ATTRIBUTES & OPTIONS	300 GB HDD	600 GB HDD	900 GB HDD	1.2 TB HDD
(Requires Isilon OneFS 7.1.1 operating system or later)				
CAPACITY (HDD/SSD)	5.4 to 7.2 TB / 0 to 1.6 TB	10.8 to 14.4 TB / 0 to 3.2 TB	16.2 to 21.6 TB / 0 to 6.4 TB	21.6 to 28.8 TB / 0 to 9.6 TB
HARD DRIVES (2.5" 10K RPM)	18 to 24	18 to 24	18 to 24	18 to 24
SELF-ENCRYPTING DRIVE (SED HDD) OPTION (2.5" 10K RPM)	No	No	Yes	No
SOLID-STATE DRIVES (400 GB, 800 GB OR 1.6 TB)	0 to 6	0 to 6	0 to 6	0 to 6
SELF-ENCRYPTING DRIVE (SED SSD) OPTION (800 GB)	No	No	Yes	No
SYSTEM ECC MEMORY	64 GB, 128 GB or 256 GB			
FRONT-END NETWORKING	2 copper 1000 Base-T (GE) and 2 x 10GE (SFP+ or twin-ax copper) or 2 x 1 Gigabit Ethernet and 2 x 40GbE (QSFP+) (Requires OneFS 8.0.0.1 or higher)			
DRIVE CONTROLLER	SAS-2, 6 Gb/s			
CPU TYPE	Dual, 6-core Intel Xeon® processor			
INFRASTRUCTURE NETWORKING	2 InfiniBand connections supporting DDR and QDR links			
NON-VOLATILE RAM (NVRAM)	2 GB			
TYPICAL POWER CONSUMPTION @ 100V	425 Watts			
TYPICAL POWER CONSUMPTION @ 240V	425 Watts			
TYPICAL THERMAL RATING	1,500 BTU/hr			

CLUSTER ATTRIBUTES	S210
NUMBER OF NODES	3 to 144
CLUSTER CAPACITY	16.2 TB to 4.15 PB
MEMORY	192 GB to 36.8 TB
RACK UNITS	6 to 288

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## PRODUCT ATTRIBUTES

<b>SCALE-OUT ARCHITECTURE</b>	Truly distributed, fully symmetric clustered architecture that combines modular storage nodes with Isilon intelligent software
<b>MODULAR DESIGN</b>	Self-contained nodes include server, software, and disks in a 2U rack-mountable node
<b>OPERATING SYSTEM</b>	Eighth 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 back-end intra-cluster failover
<b>SCALABILITY</b>	Scales from 3 to 144 nodes in a single cluster with up to 4.15 PB capacity and 200 GB/s concurrent throughput; add a node to scale performance and capacity in 60 seconds
<b>DATA PROTECTION</b>	FlexProtect™ file-level striping with support for N+1 through N+4 and mirroring data protection schemes
<b>DATA REPLICATION</b>	SyncIQ® fast and flexible file-based asynchronous replication
<b>DATA RETENTION</b>	SmartLock® policy-based retention and protection against accidental deletion
<b>DATA ENCRYPTION OPTION</b>	FIPS 140-2 level 2 validated self-encrypting drives (SEDs) with unique AES-256 bit strength keys assigned to each drive
<b>SECURITY</b>	File system audit capability to improve security and control of your storage infrastructure and address regulatory compliance requirements
<b>EFFICIENCY</b>	SmartDedupe data deduplication option, which can reduce storage requirements by up to 35 percent
<b>NETWORK PROTOCOL SUPPORT</b>	NFSv3, NFSv4, NFS Kerberized sessions (UDP or TCP), SMB1 (CIFS), SMB2, SMB3 Multichannel, HTTP, FTP, NDMP, SNMP, LDAP, HDFS, ADS, NIS reads/writes

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## ENVIRONMENTAL SPECIFICATIONS

<b>POWER SUPPLY</b>	Dual redundant, hot-swappable 875W 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>DIMENSIONS/WEIGHT</b>	Height: 3.48" (8.8 cm), width: 18.87" (47.9 cm), depth: 30.5" (77.47 cm), weight: 55 lbs (25.0 kg)
<b>MINIMUM SERVICE CLEARANCES</b>	Front: 35" (88.9 cm), rear: 14" (35.6 cm)

## SAFETY AND EMI COMPLIANCE

### STATEMENT OF COMPLIANCE

This Information Technology Equipment is compliant with the electromagnetic compatibility (EMC) and product safety regulations/standards required by the countries in which the product is sold. EMC compliance is based on FCC part 15, CISPR22/CISPR24 and EN55022/EN55024 standards, including applicable international variations. EMC compliant Class A products are marketed for use in business, industrial, and commercial environments. Product Safety compliance is based on IEC 60950-1 and EN 60951-1 standards, including applicable national deviations.

This Information Technology Equipment is in compliance with EU RoHS Directive 2011/65/EU.

The individual devices used in this product are approved under a unique regulatory model identifier that is affixed to each individual device rating label, which may differ from any marketing or product family name in this datasheet.

For additional information see <https://support.emc.com> under the Safety & EMI Compliance Information tab.

### TAKE THE NEXT STEP

Contact your Dell EMC sales representative or authorized reseller to learn more about how the Isilon S-Series can benefit your organization.

[Shop Dell EMC Isilon](#) to compare features and get more information.

