

# ISILON S-SERIES

Isilon S210

The Dell EMC Isilon S-Series scale-out NAS platform, powered by the Isilon OneFS 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.

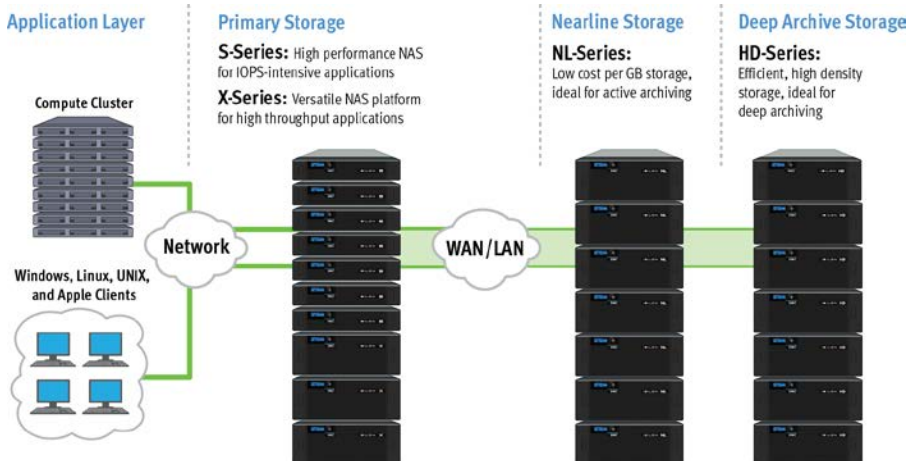
**Performance:** The Isilon S210 provides up to 3.0M IOPS and up to 175GB/s of aggregate throughput per cluster. To accomplish this level of performance, the S210 utilizes solid-state drive (SSD) and 10,000 RPM 2.5-inch Serial Attached SCSI (SAS) drive technology, a choice of dual 1GbE and dual 10GbE 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 about 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 up to 80 percent storage utilization versus about 50 percent for traditional platforms. Isilon SmartDedupe 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.

## ARCHITECTURE



## ISILON S-SERIES NODE SPECIFICATIONS

ISILON S210 NODE ATTRIBUTES & OPTIONS Requires Isilon OneFS 7.1.1 operating system or later	300 GB HDD	600 GB HDD	900 GB HDD	1.2 TB HDD
CAPACITY <sup>1</sup> (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 <sup>1</sup>	16.2 TB to 4.15 PB
MEMORY	192 GB to 36.8 TB
RACK UNITS	6 to 288

<sup>1</sup> Usable capacity will be lower than the raw capacity reflected in this specification sheet.

## PRODUCT ATTRIBUTES

SCALE-OUT ARCHITECTURE	Truly distributed, fully symmetric clustered architecture that combines modular storage nodes with Isilon intelligent software
MODULAR DESIGN	Self-contained nodes include server, software, and disks in a 2U rack-mountable node
OPERATING SYSTEM	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
HIGH AVAILABILITY	No single point of failure; self-healing design protects against disk or node failure; includes back-end intra-cluster failover
SCALABILITY	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
DATA PROTECTION	FlexProtect™ file-level striping with support for N+1 through N+4 and mirroring data protection schemes
DATA REPLICATION	SyncIQ® fast and flexible file-based asynchronous replication
DATA RETENTION	SmartLock® policy-based retention and protection against accidental deletion
DATA ENCRYPTION OPTION	FIPS 140-2 level 2 validated self-encrypting drives (SEDs) with unique AES-256 bit strength keys assigned to each drive
SECURITY	File system audit capability to improve security and control of your storage infrastructure and address regulatory compliance requirements
EFFICIENCY	SmartDedupe data deduplication option, which can reduce storage requirements by up to 35 percent
NETWORK PROTOCOL SUPPORT	NFSv3, NFSv4, NFS Kerberized sessions (UDP or TCP), SMB1 (CIFS), SMB2, SMB3 Multichannel, HTTP, FTP, NDMP, SNMP, LDAP, HDFS, ADS, NIS reads/writes

## ENVIRONMENTAL SPECIFICATIONS

POWER SUPPLY	Dual redundant, hot-swappable 875W power supplies with power factor correction (PFC)
OPERATING ENVIRONMENT	50° F to 95° F (10° C to 35° C), 5% to 95% relative humidity, non-condensing
DIMENSIONS/WEIGHT	Height: 3.48" (8.8 cm), width: 18.87" (47.9 cm), depth: 30.5" (77.47 cm), weight: 55 lbs (25.0 kg)
MINIMUM SERVICE CLEARANCES	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

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