



How breakthroughs begin.™

Isilon X-Series Specifications



PRODUCT ATTRIBUTES

Clustered Architecture	Truly distributed, fully symmetric clustered architecture that combines modular storage nodes with Isilon's intelligent software.
Modular Design	Self-contained nodes include server, software and disks in a 2U rack-mountable node.
Distributed File System	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 failures. Includes backend intracluster failover.
Scalability	Initial cluster set-up in under 10 minutes. Add new nodes for performance and capacity in 60 seconds.
Protection Levels	FlexProtect-AP file-level striping with support for N+1 through N+4 and mirroring data protection schemes.
Network Protocol Support	NFS v3 (UDP or TCP), CIFS, FTP, HTTP reads/writes.
Client Support	Microsoft® Windows , Linux, UNIX, Apple® Macintosh.
Front-End Networking	Two (2) copper 1000 Base-T (Gigabit Ethernet) per node.
Intracluster Networking	Two (2) InfiniBand® connections.

SOFTWARE HIGHLIGHTS

Automatic Content Migration	AutoBalance automatically redistributes data and maximizes utilization across entire cluster when new nodes are added. No downtime, application changes or manual intervention is required.
Accelerated Access to Content	Files are striped across nodes in a cluster. SmartCache algorithms predict content access patterns and accordingly cache data to ensure maximum performance for popular files in a huge and unified memory cache.
Flexible File Protection	FlexProtect-AP allows data protection levels to be changed on the fly and can be set at cluster, directory and file levels. Operates as a background operation, requiring no downtime.
Platform Extension	TrueScale™ enables the addition of Isilon IQ Accelerator and EX 6000/9000/12000 extension products to scale performance and capacity independently.
Management	Powerful web-based management interface. Command line interface (Telnet/SSH). Front panel LCD.
Monitoring	Support for SNMP v2/v3. Environmental monitoring system for monitoring fans, power, temperature, operating voltages and node status. Web-based and LCD/LED monitoring of health, capacity and performance.
Alerting	Email alerts to administrator(s). Email-home to Isilon for proactive customer support. Front panel LCD and LEDs. SNMP support.
Authentication and Security	Support for Microsoft Active Directory Services (ADS), Network Information Service (NIS) and Lightweight Directory Access Protocol (LDAP).
Data Integrity	MediaScan proactive file-level health check continuously and automatically runs in the background to analyze and heal files, ensuring long-term data integrity.
Backup and Restore	Supports standard NDMP v3 and v4.

LICENSABLE APPLICATION SOFTWARE

SyncIQ™	Delivers extremely fast replication of files across multiple Isilon IQ clusters over WAN and LAN.
SnapshotIQ™	Delivers breakthrough snapshot technology for simple, flexible and scalable data protection of large storage environments.
SmartConnect™	Maximizes performance and availability of client connections by providing automatic load balancing and NFS failover across all Isilon IQ nodes within the cluster.
MigrationIQ™	Enables automatic and simple migration of digital content between storage tiers.
SmartQuotas™	Delivers quotas and thin provisioning for clustered storage.
Aspera for Isilon IQ	High performance wide area file and content delivery.

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ENVIRONMENTAL SPECIFICATIONS

Power Supply	Dual redundant, hot-swappable 650W 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
Non-Operating Environment	-40° F to 149° F (-40° C to 65° C), 5% to 95% relative humidity, non-condensing
Dimensions/Weight	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
Minimum Service Clearances	Front: 35" (88.9 cm), Rear: 14" (35.6 cm)

Single Node Attributes	Isilon IQ 1920	Isilon IQ 3000	Isilon IQ 6000	Isilon IQ 9000	Isilon IQ 12000										
Capacity	1.92 TB	3.00 TB	6.00 TB	9.00 TB	12.00 TB										
Hard Drives (hot-swappable)	Twelve (12) 3.5" SATA-2 160 GB HDD	Twelve (12) 3.5" SATA-2 250 GB HDD	Twelve (12) 3.5" SATA-2 500 GB HDD	Twelve (12) 3.5" SATA-2 750 GB HDD	Twelve (12) 3.5" SATA-2 1 TB HDD										
Storage Expansion	N/A	N/A	YES — via Serial Attached SCSI (SAS)	YES — via Serial Attached SCSI (SAS)	YES — via Serial Attached SCSI (SAS)										
Typical Power Consumption @ 100v	3.6A	3.6A	3.6A	3.6A	3.6A										
Typical Power Consumption @ 240v	1.5A	1.5A	1.5A	1.5A	1.5A										
Typical Thermal Rating	1250 BTU/hour	1250 BTU/hour	1250 BTU/hour	1250 BTU/hour	1250 BTU/hour										
CPU Type	2.0 GHz Dual core Intel® Xeon™ processor 5130														
Front-End Networking	Two (2) copper 1000 Base-T (Gigabit Ethernet) per node														
Intracluster Networking	Two (2) InfiniBand® connections per node														
ECC Memory	4 GB of FBDiMM Cache														
Non-volatile RAM (NVRAM)	512 MB														
External Indicators	Cluster status and alert (LED) and front panel LCD														
Cluster Attributes (Nodes)	3 (min)	10	96 (max)	3 (min)	10	96 (max)	3 (min)	10	96 (max)	3 (min)	10	96 (max)	3 (min)	10	96 (max)
Capacity (TB)	5.7	19.0	184	9	30	288	18	60	576	27	90	864	36	120	1152
Memory (GB)	12	40	384	12	40	384	12	40	384	12	40	384	12	40	384
Rack Units (RU)	6U	20U	192U	6U	20U	192U	6U	20U	192U	6U	20U	192U	6U	20U	192U

INDUSTRY CERTIFICATIONS

North American (NA) Safety

UL/cUL Listing (UL 60950-1:2003, First Edition)
CSA C22.2 No.60950-1-03

International Safety

CB Scheme IEC 60950-1 (2001) First Edition with all national deviations

European Union (EU) Safety

CE, Low Voltage Directive

NA EMC

US FCC Part 15/ Canada IC ICES-03

International EMC

EU EMC Directive (EN 55022 & EN 55024)
Japan (VCCI) South Korea (MIC)

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