



DSN-6000 Series Storage Arrays



Product Highlights:

Complete solution including Snapshots and Remote Replication

Redundant architecture:

- RAID controllers
- Power supplies
- Fan modules
- Battery backup modules
- JBOD expansion

Advanced data protection:

- RAID Level 0,1,0+1,3,5,6,10,30,50,60
- Writeable Snapshot
- Windows VSS support

Flexible volume management for multiple applications & environments:

- Virtualisation (VMware, Microsoft Hyper-V and Citrix)
- Cloud storage
- SQL
- Exchange
- IP Surveillance
- Backup and Restore

Scheduled remote replication:

- Asynchronous replications for up to 8 logical volumes
- Full replication and incremental replication support
- Manual & schedule tasks support
- Dedicated port reservation for replication usage
- Windows and Linux host utilities support

19" rack mountable, 2U

Four 1GbE or two 10GbE iSCSI ports per controller

Up to 200,000 IOPS

Up to 900 MB/sec throughput

Hot-pluggable design

High connection availability:

- Load Balancing
- Failover

Expandable capacity up to 60 Drives (180 TB)

Hardware iSCSI offloaded engine

Energy-saving design:

- Auto disk spin-down
- Auto fan speed
- 80 PLUS energy-efficient power supplies

The DSN-6000 Series are a range of high performance, fully redundant storage solutions that are simple to deploy and manage.

All DSN-6000 storage solutions are supplied complete with snap shot capabilities and remote replication as standard so there is no need for additional licenses. Also each RAID controller is equipped with 4GB cache to ensure maximum performance straight out of the box.

As with all D-Link storage solutions, the DSN-6000 Series uses an integrated and intuitive management GUI to ensure the system can be up and running in no time, even with limited IT knowledge. D-Link also provides optional comprehensive on-site service and support ensuring that your storage solution will be repaired quickly should the worst happen.

The DSN-6000 Series currently supports 36TB of raw capacity per shelf using 3TB drives (and even greater capacity as larger disk drives become available), and overall scalability to 180TB using DSN-6020 Expansion Enclosure. D-Link's DSN-6000 Series provides 1GbE or 10GbE host interface connectivity which can handle over 200,000 I/O per second. The DSN-6000 Series supports applications demanding high throughput, scalability and flexible storage planning.

The DSN-6000 Series can be easily implemented as primary storage, as secondary storage to supplement an existing infrastructure, or as a nearline storage device to improve backup and recovery times. Using the intuitive and integrated management GUI, the DSN-6000 Series Arrays can be seamlessly incorporated in both Physical and Virtual Server environments.

High Availability

The DSN-6000 Series can provide the failover and redundancy capabilities required for mission critical scenarios such as Virtual Machine (VM) shares, database hosting, Online Transactional Processing (OLTP), email hosting, storage consolidation and other primary storage needs. It is equipped with fully redundant components for all major functions, such as RAID controllers, power supplies, fan modules, battery backup modules, and SAS JBOD expansion ports. The Hot-pluggable design is capable of providing uninterrupted services.

Remote replication provides continuous data protection ensuring your valuable data is safe in the event of a catastrophic system failure in your primary site or data centre, one source target can be setup with multiple destination targets, allowing administrators to replicate data to different locations. Snapshot technology ensures data can be restored quickly and easily without the need for lengthy restore from a back-up. Remote replication and Snapshot technology are supplied as standard with all DSN-6000 Series storage solutions.

In addition, the DSN-6000 Series incorporates advanced high availability features such as RAID 6 and RAID 60, writable snapshot, Microsoft Windows™ VSS support, and volume configuration restoration. These advanced features help to reduce or eliminate any system downtime. Unlike other vendors, D-Link's DSN-6000 Series is able to upgrade to firmware without the system going offline. Both firmware image and volume handling are well protected by the redundant RAID controllers; when one RAID controller is down or has lost connection, the other RAID controller takes over its tasks immediately. This feature ensures that volumes and services are transferred seamlessly and simultaneously.

DSN-6000 Series

Storage Arrays



If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly-trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best:

D-Link Assist Gold - for comprehensive 24-hour support

D-Link Assist Gold is perfect for mission-critical environments where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

D-Link Assist Silver - for prompt same-day assistance

D-Link Assist Silver is designed for 'high availability' businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist Bronze - for guaranteed response on the next business day

D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

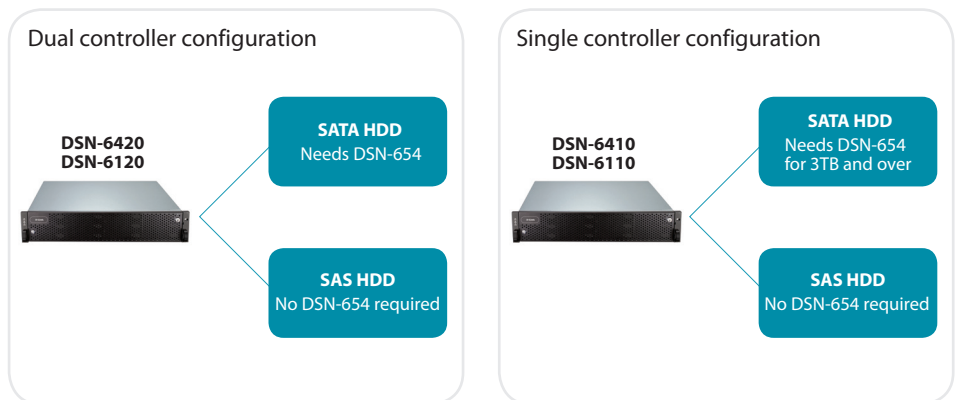
Applications

The optimised Input/Output Operations per second and unparalleled throughput are capable of providing run-time critical online services, such as Cloud storage, SQL, Exchange, and high-end surveillance storage. Furthermore, with its iSCSI interface, D-Link's DSN-6000 Series is ideal for virtualisation environments - VMWare, Hyper-V, and Citrix. System administrators can install up to 32 Operating Systems onto the iSCSI system through the Boot-from-SAN functionality. With this feature, the multiple Operating Systems/Servers can be easily managed and protected by D-Link advanced data protection features, avoiding system downtime caused by single points of failure.

Expansion Options

The capacity of the DSN-6000 Series storage arrays can be easily expanded with the addition of the DSN-6020 Expansion Enclosure, which supports up to 12 SAS and SATA hard drives. Up to 4 DSN-6020 enclosures can be mounted in a storage array to expand the overall capacity to 180TB, and even higher capacity as larger hard drives are introduced.

SATA drives in the following configurations need a SATA bridge board:



Green Energy Savings

The DSN-6000 Series is equipped with D-Link Green features for saving power. A hard drive can be a very power-hungry component in a SAN. When properly configured, the power consumption of hard drives can be reduced to a minimum using the auto disk spin down feature. The DSN-6000 Series systems monitor environmental temperatures to optimise the cooling mechanism. The fan modules respond only when needed. The power supply modules are all 80 PLUS power efficient, providing a more favorable power conversion rate. When combined, these power-saving features help to greatly reduce energy consumption and increase the product's lifespan.

SATA Bridge Board (DSN-654)

The SAS to SATA bridge board is designed to enable single-ported SATA drives to connect seamlessly like native dual-ported SAS drives.

DSN-6000 Series Storage Arrays



Technical Specifications

	DSN-6110	DSN-6120	DSN-6410	DSN-6420
Hardware Components				
RAID Controller	Single controller	Dual controllers	Single controller	Dual controllers
No. of Host Channels Per Controller	4 x 1 GbE iSCSI Ports	8 x 1 GbE iSCSI Ports	2 x 10 GbE iSCSI Ports	4 x 10 GbE iSCSI Ports
Expansion Enclosure	DSN-6020			
Cache Memory Per Controller	4GB			
No. of Hard Drives (SAS & SATA II)	12			
Maximum Number of Hard Drives Supported	60			
Power Supply	2 x 500W			
Dimensions	2U 19" Rackmount 442.8mm x 500.6mm x 88.0mm (W x D x H)			
D-Link Green	Auto disk spin down Advanced cooling mechanism 80 PLUS energy-efficient power supplies			
iSCSI	Hardware iSCSI off-load engine iSCSI jumbo frame Header/Data digest CHAP authentication Up to 32 multiple nodes support Up to 128 sessions per controller			
RAID & Volume	RAID level 0,1,0+1,3,5,6,10,30,50, 60, JBOD, N-way mirror Up to 1024 logical volumes Up to 32 hard drives per volume group One logic volume can be shared by as many as 16 hosts Global and dedicated hot spare Write-through or write-back cache policy Online volume expansion Instant RAID volume availability Auto volume rebuilding On-line volume migration without system down time			
High Availability	Dual-active RAID controller Cache mirroring through high bandwidth channels Flexible RAID group ownership management Management port seamless take-over Online firmware upgrade, no system down time Multi-path & load-balancing support (Microsoft MPIO, MC/S, Trunking, LACP)			
Advanced Data Protection	Writable snapshot Microsoft Windows Volume Shadow Copy Services (VSS) Configurable N-way mirror Online disk roaming Instant volume configuration restoration Hot pluggable battery backup module (BBM)			
Management	LCM; Serial console; SSH telnet; HTTP Web UI; Secured Web (HTTPS); iSNS; S.E.S.			
Data Security	Volume replication tool with multipath support VLAN 802.1Q, 802.1p support			
Notification	Email; SNMP trap; Browser pop-up windows; Syslog; Windows Messenger			
OS Support	Windows; Linux; Solaris; Mac			
Virtualisation	VMWare; Hyper-V; Citrix			
Warranty	3-year Warranty for system 1-year Warranty for battery backup module			

D-Link Europe

D-Link European HQ
www.dlink.eu

Albania
www.dlinkadria.eu

Austria
www.dlink.at

Belgium
www.dlink.be

Bosnia & Herzegovina
www.dlinkadria.eu

Bulgaria
www.dlink.eu

Croatia
www.dlinkadria.eu

Czech Republic
www.dlink.cz

Denmark
www.dlink.dk

Finland
www.dlink.fi

France
www.dlink.fr

Germany
www.dlink.de

Greece
www.dlink.gr

Hungary
www.dlink.hu

Italy
www.dlink.it

Kosovo
www.dlinkadria.eu

Luxembourg
www.dlink.lu

FYR Macedonia
www.dlinkadria.eu

Montenegro
www.dlinkadria.eu

Netherlands
www.dlink.nl

Norway
www.dlink.no

Poland
www.dlink.pl

Portugal
www.dlink.pt

Romania
www.dlink.ro

Serbia
www.dlinkadria.eu

Slovenia
www.dlinkadria.eu

Spain
www.dlink.es

Sweden
www.dlink.se

Switzerland
www.dlink.ch

UK & Ireland
www.dlink.co.uk



For further information: www.dlink.eu



D-Link European Headquarters. D-Link (Europe) Ltd., D-Link House, Abbey Road, Park Royal, London, NW10 7BX. Specifications are subject to change without notice. D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries. All other trademarks belong to their respective owners. ©2011 D-Link Corporation. All rights reserved. Europe Release September 2011