



AssuredSAN™

3520 and 3530

BENEFITS



Assured Data Protection

AssuredSnap™ - 1000 snapshots
AssuredCopy™ - 512 volume copies

Scalable Performance

Dual RAID controller
Accelerate Read/Write performance
Data rates up to 6Gb/sec. SAS 2.0
Up to 7 expansion units per system
Support for SAS, SATA, solid state drives (SSDs)
Max 144 drives - 3523, 96 - 3533

Built in Redundancy

RAID 0, 1, 3, 5, 6, 10, 50
Redundant, hot-swap components
Built-in schedule capability

Green Features

EcoStor™ Economically and environmentally sound technologies
- SimulCache™ - Low latency cache mirroring
- Battery-free cache backup
- Drive-spin-down
RoHS-5/6 compliance - 3533
RoHS-6 compliance - 3523
WEEE compliant

LINEAR PERFORMANCE SYSTEMS

Optimized for Sequential Workloads

The Dot Hill 3523 and 3533 are designed to optimize sequential workloads in direct attached storage environments. The 3523/3533 storage systems support for SATA, SSD and 3Gb and 6Gb SAS drives to support tiered storage initiatives, with expansion of up to seven JBOD systems.

Data Protection

The 3523 and 3533 come with optional AssuredSnap™ and AssuredCopy™ data protection software. With up to 1000 snapshots capability, they offer necessary protection for business critical applications such as email.

AssuredSAN storage arrays support Mac OS X, Linux, and Windows environments.

Applications

- On-demand video
- Video streaming
- High definition imaging
- Post-production editing
- Blade server applications

Environmentally Responsible

Utilizing Dot Hill's patented EcoStor™ technology, these systems have completely eliminated cache batteries, using instead super capacitors and flash memory to provide infinite cache backup during a power loss, while being environmentally friendly.

The AssuredSAN 3000 Series also features energy saving drive-spin-down. With the addition of drive spin-down, mixed drive type support and dual protocol interfaces, users can now combine both high performance primary volumes and secondary storage with different performance and energy usage profiles in the same physical unit.



Enhanced Performance

The storage systems leverage patented SimulCache™ technology that instantly and simultaneously mirrors cache between RAID controllers, leading to significant performance improvements over traditional implementations.

AssuredCopy™ and AssuredSnap™

The AssuredSAN data protection and disaster recovery solution comes with optional AssuredSnap™ and AssuredCopy™ data protection software. With up to 1000 snapshots capability, AssuredSAN solutions offer necessary protection for business critical applications such as email, databases, and file sharing.

AssuredSnap instantly takes volume snapshots, creating point-in-time backups that can be used to instantly restore your data after a system failure. In addition, you get AssuredCopy, which protects against disk failures.

Storage Made Easy

AssuredSAN arrays are easy to configure and manage with RAIDar 2.0, our intuitive web based interface which provides storage setup and monitoring without the need for host based software. RAIDar 2.0 saves time with configuration and installation wizards, and schedulers for snapshots and replication.

- Easy to set up Configuration, Installation Wizards
- Automated 'Set and Forget' scheduler for snapshots
- Instant Backup AssuredSnap instantly takes point in time copies
- Instant Restore No time consuming tape recoveries. Use our snapshots to step back in time.
- International Localization for Dutch, French, German, Italian, Spanish, Simplified Chinese, Traditional Chinese, Japanese, and Korean including translated online help.

support

Warranty

AssuredSANs come with a three year standard hardware warranty, a 90 day software warranty, and Bronze level support, which provides you with expert 24/7 technical telephone support. You also receive access to our SANsolve and the Customer Resource Center with knowledge base articles, product documentation and firmware upgrades.

Gold and Platinum Support Programs

Dot Hill is equipped to provide the extra level of support you may need to meet your service level agreements. Our Gold and Platinum levels of support are designed to offer maximum responsiveness anywhere in the world. These programs include options for same day advance shipment, parts depot access, next business day, and 4-hour onsite service. We also offer extended hardware warranties and extended software support packages.

Professional Services

In addition, Dot Hill offers professional services such as installation, remote monitoring, remote site DR set up, and configuration, designed to make it simple and straightforward to fully deploy AssuredSAN storage solutions.

shipping information

3520C

Packaged product weight 69.35 lbs with drives

Packaged product dimensions Width 25.5", Height 10", Depth 28.5"

3530C

Packaged product weight 82.75 lbs with drives

Packaged product dimensions Width 25.5", Height 10", Depth 28.5"

3520 and 3530 OEM Model

These models are available for volume OEM customers. An optional OEM Customization Kit is available which allows OEM customers to create their own branded storage solutions.

models

3520C, 3530C

The AssuredSAN 3523 and 3533 are hardware only models that ship with the storage array, drives, cables, Installation Guide, and Bronze support. The Try & Buy menu in the RAIDar management interface allows customers to start using data protection or remote replication software at any time.

With 2.5" Drives - 3520

Drives per array up to 24
Max capacity per chassis 24TB

PHYSICAL

Depth (excluding cables) 21.3 Inches / 54.0 cm
Height 3.5 Inches / 8.9 cm
Width 17.6 Inches / 44.7 cm
Chassis weight 50.6 lbs / 23kg

Optional DR Software

1000 AssuredSnap instances, 512 AssuredCopy instances can be added at the time of purchase or afterwards.

With 3.5" Drives - 3530

Drives per array up to 12
Max capacity per chassis 36TB

PHYSICAL

Depth (excluding cables) 23.7 Inches / 60.2 cm
Height 3.5 Inches / 8.9 cm
Width 17.6 Inches / 44.7 cm
Chassis weight 64 lbs. / 29kg



GENERAL

Host speed	6Gb SAS
Data protection	AssuredSnap™, AssuredCopy™

EXPANSION

Max number of chassis	up to 8 (1 RAID, 7 JBOD)
Expansion units	Dot Hill 3120, 3130

PROTOCOLS AND STANDARDS

ICMP (RFC 792, 950, 1256)	TCP (RFC 793)
IP (RFC, 894, 1092)	SCSI-2 and SCSI-3

HOSTS

Initiators	SAS 2.0 (Serial-attached SCSI)
Interface Type	SAS SFF8088
External Ports	4/8 SAS (Single/Dual Controller)

DRIVE SUPPORT

3520	SAS, SSD
3530	SAS, SATA, SSD

RAID

Levels Supported	0, 1, 3, 5, 6, 10 and 50
RAID Type	Hardware
Cache Memory	2GB per controller
Cache Backup	Battery-free protection w/super capacitors
Virtual disks per System	32
Volumes per virtual disk	256
Volumes per System	256
Mirrored Cache	Yes - SimulCache™
Super Capacitor Cache Backup	Yes
Cache Backup to Flash	Yes - Non-volatile

MANAGEMENT

Interface Types	10/100 Ethernet, Mini USB
Protocols Supported	SNMP, SSL, SSH, SMTP, SMI-S Provider, HTTP(S)
Management Consoles	WEB GUI, CLI
Management Software	RAIDar 2.0

POWER REQUIREMENTS - AC INPUT

Input Power Requirements	100-240VAC 50/60Hz
Max Input Power	436W maximum continuous
Heat Dissipation	1488 BTUs/hour

Bronze Rated - high efficiency

82% @ 20% load
86% @ 80% load
85% @ 100% load

TEMPERATURE AND HUMIDITY RANGES

Operating Temperature	41°F to 104°F (5°C to 40°C)
Shipping Temperature	-40°F to 158°F (-40°C to 70°C) Note: Derate 2°C for every km, up to 3000 meters
Operating Humidity	10% to 90% RH @ 104°F (40°C), non-condensing
Non-Operating Humidity	Up to 93% RH @ 104°F (40°C) non-condensing

DECLARED ACOUSTIC NOISE LEVELS

Sound Power	LWAd=6,75 B
Sound Pressure	LpAm - 55dB _A

SHOCK AND VIBRATION

Shock, Operational	5G's for 10 ms
Shock, Non-Operational	15G 11ms, half sine
Vibration, Operational	5Hz to 500Hz, 0.21Grms flat spectrum
Vibration, Non-Operational	3-365-3Hz, 1.22 Grms, z-axis, 0.85 Grms, X&Y axis shaped spectrum

Note: Dot Hill AssuredSAN disk arrays chassis, power supplies, and controllers support NEBS, ETSI, and MIL-STD-810G shock and vibration standards. Hard disk drive selection may alter ability to achieve full compliance with these specifications as HDD's have varying S&V performance characteristics.

HIGH-AVAILABILITY FEATURES

Redundant Hot-Swap Controllers	Yes
Redundant Hot-Swap Disk, Fans, Power	Yes
Dual Power Cords	Yes
Hot Standby Spare	Yes
Automatic Failover	Yes
Multi-Path Support	Yes
Snapshot with AssuredSnap™	Yes
Volume Copy with AssuredCopy™	Yes

REGULATORY

Safety	UL 60950-1, 1st edition, 2007-10-31 (USA) CAN/CSA-C22.2 No.60950-1-03, 1st Edition, 2006-7 (Canada) EN 60950-1:2006 (European Union) EC 60950-1:2001 (International) EN 60950-1:2001 +A11:2004 (GS
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Mark.,Germany)

CCC Mark (power supply only, China PRC)

Electromagnetic Compatibility Emissions	CFR 47 Part 15 Subpart B Class A (U.S.A.) ICES-003:2004 Class A (Canada) EN 55022:2006 +A1:2007 Class A (EU) EN 300 386 V1.4.1:2008 Class A (EU Telco) AS/NZS CISPR 22:2009 Class A (Australia, New Zealand) VCCI:2009-04 Class A (Japan) GOST R 51318.22-99 Class A (Russia) KN 22 Class A (S. Korea) CNS 13438:2006 Class A (Taiwan) EN61000-3-2:2006 (EU) EN 61000-3-3:1995 +A1:2001+A2:2005
Harmonics Flicker (EU)	EN 55024:1998 +A1:2001+A2:2003 (EU) EN 300 386 V1.4.1:2008 (EUTelco) GOST R 51318.24-99 (Russia) KN 24 (S. Korea)
Immunity	RoHS-6/6 Compliance, China RoHS, WEEE United States, Canada, European Union (EU), Australia/New Zealand, Japan, China (PRC), Russia, Mexico, South Africa, Germany, South Korea, Taiwan

RoHS and WEEE
Country Approvals

SUPPORT

Software Warranty	90 days
Standard Hardware Warranty	3 years
Environmental Monitoring	SNMP, CLI, RAIDar 2.0, SMTP, SMI-S Provider
SMTP	Yes
Remote Diagnostics	Yes
Non-disruptive Updates	Yes
Non-disruptive Volume Expansion	Yes for primary volumes and

