Dot Hill 2332

High Performance entry level iSCISI Storage Array





Built in Redundancy

- RAID 0, 1, 3, 5, 6, 10, 50
- · Redundant, hot swap components
- AssuredSnap™ Snapshot capability
- \bullet AssuredCopy $^{\text{TM}}$ Additional data protection with full volume copies
- Built-in schedule capability

Scalability and Performance

- Dual or single RAID controller or JBOD
- Utilizes existing Ethernet network infrastructures
- 1.7TB base capacity that scales to 192TB (utilizing 2TB SATA drives)
- · OS Support Windows, Linux, SuSE, Solaris

Easy Set-up and Management

- Unified LUN architecture streamlines configuration
- RAIDar 2.0 full featured management interface

Environmentally Responsible / Lower TCO

- \bullet EcoStor $^{\mathsf{TM}}$ Economically and environmentally sound technologies
- SimulCache™ Low latency cache mirroring
- Battery-free cache backup
- DC power option
- 1 terabyte energy saving drives
- RoHS-5 and WEEE compliant

Premium performance for Ethernet-based SANs

The 2332 from Dot Hill Systems serves the growing iSCSI SAN market allowing customers to easily create their own Ethernet-based storage area networks. The powerful 2332 storage systems are scalable, highly reliable, high-performance, and easy to set up and manage. With its high performance and high capacity, Dot Hill 2332 storage systems are used for virtualized storage, file systems, Share Point, MS Exchange, MS SQL, just to name a few applications.

The 2332 features a12-drive array housed in a 2 rackunit (2U) enclosure providing dual 1Gb iSCSI interfaces per controller to 3.5-inch SAS, SATA, or solid state drives. Up to seven JBOD expansion units can be easily added.

Eco-friendly EcoStorTM

The 2332 uses super capacitors instead of RAID cache batteries, providing infinite cache backup during a power loss while being environmentally friendly. Using super capacitors eliminates the need for battery maintenance, reducing the total cost of ownership.

Advanced Data Protection Provides Instant Recovery

Is your data essential to your business operations? Then it makes sense to add data protection options - AssuredSnap™ and AssuredCopy™. AssuredSnap™ provides the 2332 storage array with volume snapshot capability allowing point-in-time copies that can be used to maximize business continuity. AssuredCopy™ creates a full volume copy which protects against disk failures. Dot Hill's 'set and forget' scheduler capability gives storage administrators peace of mind. Make sure you have the backups that enable quick point-in-time recovery.

Easy Management Tool with Wizards

Dot Hill storage systems are easy to configure and manage with improved RAIDar 2.0, the intuitive Web Based Interface (WBI) which provides storage setup and monitoring without the need for host based software. RAIDar 2.0 contains installation and configuration wizards to make management easy.

Dot Hill 2332 specifications

■ GENERAL

Product Family 2002 Series
Product Type RAID, JB0D

Chassis Configuration 2U

Disk Architecture 3Gb SAS/3Gb SATA-II

Max Drives per Chassis 12 drives

Total Capacity 1.7TB/192TB (with expansion trays)

Total Disks 96

Mounting Options

19" Rack, Telco Rack, Rack tray

Max Number of Chassis

8 (1 RAID and 7 JBOD)

Max Capacity per Chassis

24TB (2TB SATA-II drives)

Data Management Services (DMS) AssuredSnap™, AssuredCopy™

■ PROTOCOLS AND STANDARDS

 iSCSI (IETF)
 ICMP (RFC 792, 950, 1256)

 IP (RFC, 894, 1092)
 SCSI-2 and SCSI-3

 TCP (RFC 793)
 FC Channel

HOSTS All ISC

Initiators All iSCSI compliant initiators

Interface Type RJ-45

External Ports 2/4 iSCSI (Gigabit Ethernet)
Single/Dual Controller

3.5" Drive Options SAS 300GB 15K RPM SAS 450GB 15K RPM

SAS 600GB 15K RPM
SATA-II 500GB 7200 RPM
SATA-II 750GB 7200 RPM
SATA-II 17B 7200 RPM
SATA-II 27B 7200 RPM

RAID Type Hardware

Cache Memory 1GB per controller

Cache Backup Battery-free protection with super capacitors

Virtual disks per System 32 Volumes per virtual disk 128 Volumes per System 256

Mirrored Cache Yes - SimulCache™

Super Capacitor Cache Backup Yes

Cache Backup to Flash Yes - Non-volatile

■ MANAGEMENT

Interface Types Mini DB9 RS232, 10/100 Ethernet

Protocols Supported SNMP, SSL, SSH, SMTP
Management Consoles WEB GUI, CLI
Management Software RAIDar 2.0

■ POWER REQUIREMENTS - AC

Input Power Requirements 100–240VAC, 50/60 Hz, 4.5-1.9A

Max Input Power 475W maximum continuous

Heat Dissipation 1622 BTU/hour

■ POWER REQUIREMENTS - DC

Voltage -39 to -72VDC, -48/-60V nominal
Max Input Power 500W maximum continuous

Max Input Power 500W maximum cor Heat Dissipation 1706 BTU/hour

■ TEMPERATURE AND HUMIDITY RANGES

MIL STD 810G, method 501.5

Operating Temperature 41°F to 104°F (5°C to 40°C)
Short Term Operating Temp.(<96 hours) 23°F to 131°F (-5°C to 55°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 <6.03B Sound Power
Sound Pressure <55dBA Sound Pressure

SHOCK AND VIBRATION

Shock, Operational 5.0G, 10ms, half sine
Shock, Non-Operational 15G 11ms, half sine
Vibration, Operational 0.21Grms Random 5Hz to 500Hz

flat spectrum/feed forward

Vibration, Non-Operational (1hr) X & Y axes - 0.85 Grms 3Hz - 365 Hz

Z axis - 1.2 Grms 3Hz - 365H

■ HIGH-AVAILABILITY FEATURES

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

■ REGULATORY.....

Safety UL 60950-1:2003 (USA)

CAN/CSA-C22.2 No.60950-1-03 (Canada) EN 60950-1 :2001 + A11 (EU) IEC 60950-1 :2001 (International)

Electromagnetic Compatibility CFR 47 Part 15 Subpart B (U.S.A. Class A)

ICES-003:2004 Class A

EN55022:2006 + A1:2007 Class A EN51000-3-2 2006 (Harmonics) EN61000-3-3 1995 (Amended by A1:2001 and A2:2005) (Flicker) EN55024 1998 (Amended by A1:2001

and A2:2003) (EU, Immunity)

RoHS and WEEE RoHS-5 Compliance , China RoHS, WEEE

Country Approvals Australia/New Zealand, Canada, China (PRC),

European Union (EU), Germany (GS Mark), Japan, United States

■ SUPPORT

Software Warranty 90 days Standard Hardware Warranty 3 years

Environmental Monitoring SNMP, CLI, RAIDar, SMTP

Phone-home Capability Yes
Remote Diagnostics Yes
Non-disruptive Updates Yes

Non-disruptive Volume Expansion Yes for primary volumes

and snapshot volumes

■ PHYSICAL

 Height
 3.5 Inches / 8.9cm

 Depth (excluding cables)
 23.7 Inches / 60.2cm

 Width
 17.6 Inches / 44.7cm

 Chassis Weight
 44lbs. / 19.96kg

 Chassis (w/250GB drives) Weight
 65lbs. / 29.48kg

