



2330

SPECIFICATION SHEET

Leading the way: Next-generation connectivity and flexibility.



spec

Built in Redundancy

- RAID 0, 1, 3, 5, 6, 10, 50
- Redundant, hot swap components
- AssuredSnap™ - Built-in snapshot capability
- AssuredCopy™ - Additional data protection with full volume copies
- Built-in schedule capability

Scalability and Performance

- Dual or single RAID controller or JBOD
- Scales to 56TB capacity utilizing 1TB SATA drives
- OS Support - Windows, Linux

Environmentally Responsible / Lower TCO

- Utilizes existing Ethernet network infrastructures
- EcoStor™ - Economically and environmentally sound technologies
 - SimulCache™ - Low latency cache mirroring
 - Battery-free cache backup
- RoHS-5 and WEEE compliant
- Modular design protects your investment
- Enterprise-class features and functionality without the enterprise price

The 2330 features a 12-drive array housed in a 2 rack-unit (2U) enclosure providing four 1Gb iSCSI interfaces to internal SAS or SATA-II disk drives. An internal SAS interface allows up to five disk enclosures (including the RAID enclosure) delivering a total of 56 drives. The 2330 adapts to a broad range of applications, and the capability to mix both SATA and SAS technology within a single disk enclosure provides an optimum tiered storage environment for Information Lifecycle Management.

Revolutionary connectivity, availability, quality and value

The 2330 uses revolutionary new SimulCache™ technology that instantly and simultaneously mirrors cache between RAID controllers, leading to significant performance improvements over traditional implementations. The use of RAID cache batteries has been completely eliminated with the introduction of super capacitors, providing infinite cache backup during a power loss while being environmentally friendly. AssuredSnap™ provides the 2330 with built-in volume snapshot capability allowing point-in-time copies that can be used to maximize business continuity. AssuredCopy™ creates a full volume copy (vs. a logical volume copy with AssuredSnap) providing additional protection against disk failure and eliminating application I/O contention when accessing the same data blocks.

Storage made easy

Easily configure and manage the 2330 with RAIDar, the intuitive Web Based Interface (WBI) which provides storage setup and monitoring without the need for host based software.

2330 iSCSI

2330 Specifications

■ GENERAL

Product Family	2000 Series
Product Type	RAID, JBOD
Chassis Configuration	2U
Disk Architecture	3Gb SAS/3Gb SATA-II
Max Drives per Chassis	12 drives
Total Capacity	56TB (with expansion trays)
Total Disks	56
Mounting Options	19" Rack, Telco Rack, Rack tray
Max Number of Chassis	5 (1 RAID and 4 JBOD)
Max Capacity per Chassis	12TB (1TB 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

Initiators	All iSCSI compliant initiators
Interface Type	RJ-45
External Ports	2/4 iSCSI (Gigabit Ethernet) Single/Dual Controller

■ DRIVES

Max Number of Drives	56
Drive Options	3Gb SAS 146GB 15K RPM 3Gb SAS 300GB 15K RPM 3Gb SATA-II 500GB 7200 RPM 3Gb SATA-II 750GB 7200 RPM 3Gb SATA-II 1TB 7200 RPM

■ RAID

Levels Supported	Non-RAID, RAID 0, 1, 3, 5, 6, 10, and 50
RAID Type	Hardware
Cache Memory	512MB 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

■ POWER REQUIREMENTS

Input Power Requirements	100-240VAC, 50/60 Hz, 4.5-1.9A
Max Input Power	475W maximum continuous
Heat Dissipation	1622 BTU/hour

■ 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	<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	0.5G 1 octave/minute 5Hz to 500Hz to 5 Hz sine sweep 0.5Grms Random 20Hz to-1000Hz flat spectrum

■ 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	Yes
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 Issue 4 (Canada, Class A) EN 55022 :98 +A1 +A2 (EU, Class A) EN61000-3-2:2000+A1,+A2,+A14 (Harmonics) EN 61000-3-3 :2001 (Flicker) EN 55024 :1998 +A1 (EU, Immunity) CISPR 22 :2005 (International, Class A) CISPR 24 :97 (International, 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, South Korea, Taiwan, 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