

Solid Data Systems Solid-State Disks

- Multiplies the throughput of business-critical transactions up to 10x
- Reduces total cost of transaction-intensive applications
- Delivers the speed of memory with added benefits of being persistent, sharable, simple and reliable



Solid Data SCSI SSDs

Accelerating Business-Critical Transactions

Solid Data provides solid-state disk drive systems that enable telecommunications and financial services providers to grow their businesses by increasing their ability to deliver more transactions and messages and to deploy a broad array of value-added services.

Enterprises and individuals increasingly rely on the global digital communications infrastructure as their primary medium for information, communication, and commerce. This trend is driving a rapid rise in real-time transaction volumes, and a widespread need for infrastructure that will support business-critical applications involving very high rates of transaction and message processing. In telecommunications, Solid Data solutions enable carriers to offer value-added services - such as text messaging and pre-paid mobile billing - that increase their revenue at a lower cost per subscriber. In financial services, Solid Data products enable banks, exchanges, and trading firms to achieve real-time processing of high-volume transactions in applications such as on-line securities trading, real-time transaction clearing, and credit-card fraud prevention.

Traditionally, enterprises and system integrators have used complex and expensive approaches in using general-purpose servers for transaction-intensive applications. These approaches include adding servers and memory, spreading data across slow, poorly utilized mechanical disks, or redesigning application software. Solid Data provides a superior performance alternative in which critical transaction data is stored on solid-state disk, yielding improvements of up to 10x. In addition, solid-state disk streamlines the overall architecture while improving reliability, scalability, manageability, and cost of ownership. With models ranging from the slim entry-level e75, to the top-of-the-line model 1000, with up to 137.4 GB capacity, Solid Data provides solutions to meet a wide range of application needs.

Multiple Levels of Data Protection

For the protection of business-critical data, all Solid Data file-cache systems incorporate multiple levels of data protection that include:

- Patented Data Retention System™ includes retention disk and automatic backup control logic. In the event of a power failure, batteries provide uninterrupted power to the memory arrays. After a prescribed time period, the system moves all data onto the internal disk for indefinite retention. When power is restored, the process is reversed and the data is accessible.

- Memory arrays with patented on-the-fly error detection and correction. A full 64 bytes are dedicated to error correction code (ECC) for every 512 bytes of data storage.
- For models 800N, 900 and 1000: redundant power supplies for enterprise level system availability, and removable data-retention disk drives for quick migration to a standby system.

All Solid Data solid-state disk systems use high-reliability components and undergo extensive burn-in and testing before shipment.

Easy Installation and Operation

Solid Data solid-state disk products are available in industry-standard Ultra SCSI models. No special device drivers required.

Installation and configuration of Solid Data solid-state disks is simple and fast. After connecting the Solid Data solid-state disk and verifying operation in a supported configuration, selected hot files are moved to the Solid Data solid-state disk, and the system is ready to go. There is no need to re-engineer applications or make extensive changes to business processes. Not sure which files to move? Solid Data provides both the software tools and applications expertise to assist you.

Anytime, Anywhere Status Notifications

Remote Monitoring and Reporting (RMR) supports lights-out operation and continuous remote monitoring. A system integrator or operator can configure SNMP traps to send alerts when exception conditions are detected regarding voltages, UPS battery condition, temperature, and other status information. This capability employs a Predictive Health Notification capability that monitors potentially disruptive conditions and issues alerts before they become problems. In addition to SNMP, RMR supports a password-protected Web browser interface for anytime, anywhere viewing of status information.

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	e75	e-100	800N	900	1000
Capacity (GB)¹					
Minimum	2.1	2.1	2.1	2.1	2.1
Maximum	2.1	8.6	21.5	42.9	137.4
Host Interface Options					
Ultra SCSI HVD or LVD	1	2	2	2	2
Performance					
Patented Direct Addressing™	Yes	Yes	Yes	Yes	Yes
Minimum Access Time (microseconds)	14	14	14	14	14
Maximum IOPS ²	37,000	37,000	37,000	37,000	37,000
Data Protection					
Patented Automatic Data Retention System™	Yes	Yes	Yes	Yes	Yes
On-Board UPS	Yes	Yes	Yes	Yes	Yes
On-Board Data Retention Disk	Fixed	Fixed	Hot Swap/Fixed ³	Hot Swap	Hot Swap
Retention/Restore Rate (GB/minute)	.75	.75	1	1	1
Redundant Power Supply	No	No	Yes	Yes	Yes
Patented Error Detection/Correction (bytes dedicated per 512 byte sector)	64	64	64	64	64
Power Input Sources	1	1	2	2	1
Redundant Fans (maximum)	4	4	5/3	3	8
Remote Management					
Password-protected	N/A	Yes	Yes	Yes	Yes
Automatic Predictive Health Notification™	N/A	Yes	Yes	Yes	Yes
Monitored Parameters	N/A	20	20	20	20
SNMP Alerts	N/A	19	19	19	19
Maximum IP Alert Addresses	N/A	10	10	10	10
Color-Coded Alerts Via Web Browser	N/A	Yes	Yes	Yes	Yes
Power Requirements					
AC					
Voltage (VAC, autoranging)	90-132/180-264	90-132/180-264	90-132/180-264	90-132/180-264	90-132/180-264
Frequency (Hz, single phase)	50/60	50/60	50/60	50/60	50/60
Max Power Consumption (Watts)	70	70	270	270	370
Power Connector	NEMA 5-15	NEMA 5-15	NEMA 5-15	NEMA 5-15	NEMA 5-15
DC³					
Voltage (VDC)	N/A	N/A	-42VDC to -60VDC	N/A	N/A
Max Current (Amps)	N/A	N/A	2.5 amps	N/A	N/A
Power Connector	N/A	N/A	Barrier Strip	N/A	N/A
Physical					
Width (in/mm)	19.0/482.6	19.0/482.6	19.0/482.6	19.0/482.6	19.0/482.6
Height					
Rack Units	1U	1U	3U	3U	7U
Measure (in/mm)	1.75/44.4	1.75/44.4	5.25/133.3	5.25/133.3	12.25/311.1
Max Depth (in/mm)	27.2/692.1	27.2/692.1	27.6/701.0	27.6/701.1	27.6/701.1
Max Weight (lbs/kg)	30/13.6	30/13.6	80/36.4	70/31.8	140/63.6
Environmental					
Ambient Temperature (F/C)	41-104/5-40	41-104/5-40	41-104/5-40	41-104/5-40	41-104/5-40
Relative Humidity (non-condensing)	0-90%	0-90%	0-90%	0-90%	0-90%
Altitude					
Operating (feet/meters, above sea level)	10,000/3,048	10,000/3,048	10,000/3,048	10,000/3,048	10,000/3,048
Non-operating (feet/meters, above sea level)	40,000/12,192	40,000/12,192	40,000/12,192	40,000/12,192	40,000/12,192
Regulatory Compliances					
UL, C-UL, FCC, VDE/TUV	Yes	Yes	Yes	Yes	Yes
NEBS Level 3 (See Web site for most current approvals)	N/A	N/A	Yes ³	N/A	N/A

¹ Formatted capacities may vary.² Excludes server overheads.³ 800N-DC model.

For additional information,
visit Solid Data at www.soliddata.com/products/
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