# Disk Array XP512



### Product HP SureStore E Disk Array XP512

HP SureStore E Disk Array XP512 - It's the Next Generation of the World's Best High-Availability Storage Solution!

BIGGER...more scalability
FASTER...dramatically increased performance
COMPACT...remarkably small footprint
And it's OPEN...ideal for heterogeneous environments.

#### Leading-Edge Storage - Bigger, Faster, Compact

Introducing the new HP SureStore E Disk Array XP512, the industry's ONLY true high-end storage platform, features explosive performance, incredible scalability and reliability, with unmatched manageability in truly heterogeneous environments. The information you need is "Always Up, Always Available" anytime, anywhere.

#### The Versatility of Crossbar Architecture

The XP512's Crossbar Architecture relegates other bus-based arrays to a mid-range solution, with its explosive performance and allows excellent sequential I/O for Data Warehousing applications and technical computing environments. The exceptional random I/O performance paves the way for leading SAP, Oracle, and messaging workloads.

# Dependable Without Failure -The Ultimate Uptime Assurance

Fault-tolerant, redundant architecture ensures there is no single point-of-failure, so your data is available when you need it. Online firmware upgrades virtually eliminate planned downtime. Proven ultra-high availability disk drives guarantee superior uptime. And with no single point of failure, the XP512 is an "Always up—always Available" storage system giving you data access anytime while non-disruptive upgrades and additional capabilities for both hardware and firmware eliminate downtime as you scale your system to meet new business needs. And rest easy, the XP512 disk drives have been tested at an astonishing 2.5 million hours MTBF!

| Features  | Benefits   |  |
|---|--|--|
| RAID 0/1 and<br>RAID 5 support  | Optimizes storage performance.   |  |
| Super High-Reliability<br>18GB and 47GB<br>10,000 RPM Fibre<br>Channel Drives | Provide choice, scalability and reliability to fit your capacity requirements.   |  |
| Support for Fibre<br>Channel, SCSI,<br>and ESCON                              | Supports all your datacenter needs, from consolidation and long distance data mirroring to disaster recovery and beyond. |  |
| Battery-Protected,<br>Mirrored Write Cache                                    | Ensures all data written to an XP512 is safe – no matter what.   |  |
| 24/7/365 Protective<br>Support  | Identifies and resolves problems before they occur.  |  |



### Product HP SureStore E Disk Array XP512

Management: Broad, Simple, Powerful

HP provides the broadest integrated software portfolio, uniquely solving your IT management, disaster recovery, back up and restore, and other business critical issues. A powerful web-based management platform gives you the freedom to manage your data from anywhere – anytime – all the time.

Concerned over distance? We solved that too. We've extended our disaster recovery solutions to anywhere on the planet and created zero impact, zero downtime back up and restore solutions. So relax; your data is safe and managed. Intelligent SAN management software simply extends the capability of the XP512 by providing centralized monitoring and management of SAN infrastructure and your XP Disk Arrays.

Secure LUN Management software provides heterogeneous manageability in both NT and Solaris environments. And a common Graphical User Interface (GUI) eliminates the task of learning one set of commands each time you move to another application or workstation.

#### Strength that Withstands All Situations

Best of all, the XP512 Disk Array is THE OPEN CHOICE of 3rd party vendors. We work with what you have and what you might want: Sun, Compaq/DEC, Sequent, Novell, SGI, IBM, Hitachi and also with providers such as STK, Brocade, Ancor, Emulex, and McData.

#### Protection for Your Future Investments - Today

Not only does the XP512 support new lower-cost generations of disk technology in existing frames, but also its modular disk upgradeability reduces the need for troublesome "forklift" upgrades as capacity needs grow. The XP512 can scale from 4 disk drives to 512 disk drives without a moment of downtime. Fast, easy, secure data access across multiple mainframe and heterogeneous UNIX, HP MPE, multi-vendor Windows NT, Windows 2000 and other open systems provides a robust multi-platform solution for storage consolidation, OLTP, data warehousing, enterprise backup and restore, and disaster recovery. Broad Microsoft certification assures compatibility and uptime in Windows NT and Windows 2000 environments.

Full integration into the HP Equation storage architecture ensures open, secure SAN management - including support for HP-UX, Sun Solaris, IBM AIX and multi-vendor NT backup and restore solutions designed to avoid impact on operations. And Continuous Access XP and Continuous Access XP Extension provide exceptionally reliable, high-speed data transfer over unlimited WAN distances for disaster recovery.

#### The Ultimate Uptime Assurance

Fault-tolerant, redundant architecture ensures there is no single point-of-failure, so your data is available when you need it. Online firmware upgrades virtually eliminate planned downtime. Proven ultra-high availability disk drives guarantee superior uptime. And with no single point of failure, the XP512 is an "Always up—always Available" storage system giving you data access anytime while non-disruptive upgrades and additional capabilities for both hardware and firmware eliminate downtime as you scale your system to meet new business needs.

#### Proactive 365 x 24 Operational Support

Remote, "phone home" capabilities detect and fix problems before they occur. We offer comprehensive support and consulting services spanning your server, SAN and storage requirements.

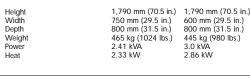
#### HP's Proven Experience

Only HP has the experience and expertise to develop any scale of datacenter storage solutions to meet your specific needs today and in years to come.

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## XP512 Technical Specifications

| Control Frame  |   | Array Control Processors (ACP)   |  |  |
|--|---|--|--|--|
| Client Host Interface Processon  | ssor (CHIP)<br>1,2,3 or 4   |  | ACP pairs Fibre Channel Arbitrated Loop paths per ACP Fibre Channel Arbitrated paths per subsystem   | 1,2,3 or 4<br>8<br>32                                  |
| Host Interfaces per subsyster<br>Maximum<br>ESCON  | 32<br>0-32<br>0-32<br>0-32<br>0-32<br>17 MB/s<br>20 MB/s<br>100 MB/s                              |  | Transfer rate<br>Crossbar architecture Internal Bandwidth  | 100 MB/sec<br>6.4 GB/sec                               |
| FWD SCSI (via Bridge)<br>Fibre Channel   |   |  | Array Frame Array Frames per subsystem Spare drives per subsystem (minimum) Spare drives per subsystem (maximum)   | 1,2,3,4,5, or 6<br>1 per drive capacity installe<br>16 |
| Transfer Rates (MB/sec)<br>ESCON<br>FWD-SCSI<br>Fiber Direct   |   |  |  |  |
| Nonvolatile Cache  | 2 GB - 32 GB  |  |  |  |
| Actuator<br>Servo system<br>Interface<br>Rotation speed<br>Data transfer rate  | 3 in. Recoilless rotary Digital Dual-ported Fibre Channel 10,025 RPM 30-46 MB/sec 5.2/6.0 2.99 ms | 3 in.<br>Recoilless rotary<br>Digital<br>Dual-ported Fibre Channel<br>10,025 RPM<br>30-46 MB/sec<br>5.7/6.5<br>2.99 ms |  |  |
| Operating System Support<br>Open Systems Server Conne<br>HP-UX<br>BIM AIX<br>Novell Netware<br>Microsoft Windows NT<br>Microsoft Windows 2000<br>Linux | ect<br>HP-MPE<br>Compaq/Tru64 Unix<br>Sequent Dynix   | Sun Solaris<br>SGI IRIX  | Mainframe Connectivity BM system 370 and 390 compatible mainframes from IBM, Hitlachi, and Amdahl Mainframe Operating System Support includes: MVS/370, VM/HPO, MVS/ESA, VM/ESA, VSE/ESA, MVS/XA, VM/XA, VSE/SP(4.1) |  |
| Physical Specifications  | Control frame Ar  | ray Frame  |  |  |
| Height<br>Width<br>Depth   |   | 790 mm (70.5 in.)<br>0 mm (29.5 in.)<br>0 mm (31.5 in.)  |  |  |







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Printed in the USA 6/00 5980-1819e

