Using HP’s AutoRAID technology to manage data storage, the HP Surestore Disk Array 12H automatically maintains the most frequently accessed data in cache and high-performance RAID 0/1 storage, while leaving less frequently accessed data in more efficient RAID 5 space.

The 12H continually tunes its performance for increased data availability, remembering when and how often data is accessed and moving it accordingly. When in operation, the cache on the controllers is mirrored, ECC-protected, and dual-battery protected for maximum high availability. Also, the contents of the cache are written to all disks when the 12H disk array is shut down.

**key features**

- AutoRAID technology for automatic optimization of data storage
- up to 2.6 TB of raw storage in a 2-meter rack
- the Model 12H supports HP’s Openview, MC/Serviceguard, MC/Lockmanager and other software
- supported on HP-UX, MPE, Windows NT® and Windows® 2000 platforms
- available in desk-side, rackmount, or factory-racked configurations
- includes up to twelve 9.1, 18.2, or 36.4 GB 10,000 rpm disk drives in one enclosure
- 16-bit SCSI-2 host interface with 20 MB/second throughput
- comes with either dual controllers (HP-UX and Windows NT) or a single controller (HP-UX only)
- supported with the Fibre Channel–SCSI Multiplexer (FC–SCSI MUX) for extra bandwidth/distance
- 99.95 percent uptime guarantee

**technical specifications**

<table>
<thead>
<tr>
<th>Performance/Throughput</th>
<th>16-bit SCSI-2 20 MB/s (wide and differential)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host Interface</td>
<td>8-bit SCSI-2 10 MB/s (single-ended), 4 buses</td>
</tr>
<tr>
<td>Drive Bus</td>
<td></td>
</tr>
<tr>
<td>Array Chassis Capacity</td>
<td>Single enclosure Up to 364 GB (usable capacity) using 36.4 GB disks</td>
</tr>
<tr>
<td></td>
<td>1.6 meter rack Up to 731.2 GB (usable capacity) using 36.4 GB disks</td>
</tr>
<tr>
<td></td>
<td>1.6 meter back-to-back rack Up to 1.46 TB (usable capacity) using 36.4 GB disks</td>
</tr>
<tr>
<td></td>
<td>2.0 meter rack Up to 1.09 TB (usable capacity) using 36.4 GB disks</td>
</tr>
<tr>
<td></td>
<td>2.0 meter back-to-back rack Up to 2.19 TB (usable capacity) using 36.4 GB disks</td>
</tr>
<tr>
<td>Storage Controller</td>
<td>96 MB (A3706A) mirrored read/write cache</td>
</tr>
<tr>
<td>Disk Drive Capacity</td>
<td>Formatted 10,000 rpm; 9.1 GB (A3713A), 18.2 GB (A3714A), 36.4 GB (A5292A)</td>
</tr>
<tr>
<td>Revolution Velocity</td>
<td>10,000 rpm</td>
</tr>
</tbody>
</table>
technical specifications (continued)

- **transfer rate**†
  - 10,000 rpm @ 5–20 MB/s
- **average seek time/average latency**
  - 10,000 rpm: <6 ms/2.99 ms
- **AC power**
  - 100/120/127 VAC or 200/230/240 VAC (autorange) (A3708A)
  - 0.0070 W
- **energy consumption efficiency**
  - VA rating: 870 VA maximum
  - Minimum power cord gauge: 16 AWG
  - Minimum/maximum number of power supplies: 2/3
- **heat dissipation**
  - 3000 BTU/hr maximum
  - 41 A max @ 120 VAC or 83 A max @ 230 VAC with three line cords combined
  - 50/60 Hz, single phase
  - Inrush current*: 41 A max @ 120 VAC, 3.8 A @ 230 VAC with all three line cords combined
  - Frequency: 50/60 Hz, single phase
  - Input current*: 41 A max @ 120 VAC, 3.8 A @ 230 VAC with all three line cords combined
  - Temperature**: operating: 41° to 104°F (5° to 40°C); non-operating: -40° to 149°F (-40° to 65°C)
  - Relative humidity**: operating: 10–80% RH @ 28°C (wet); non-operating: 10–90% RH @ 28°C (wet)
  - Vibration: 0.21 G (rms), 5–500 Hz
  - Shock: 4 G, 11 ms (1/2) sine
  - Acoustic: 5.9 B
  - Altitude: operating: 0–10,000 ft (0–3,048 m); non-operating: 0–15,000 ft (0–4,572 m)
  - Temperature gradient: 10°C/hr
- **physical characteristics***
  - Net weight: 170 lb (77.2 kg)
  - Shipping: 202.5 lb (92 kg)
  - Height: 22.8 in (57.8 cm)
  - Width: 16.7 in (42.5 cm)
  - Depth: 12.2 in (31 cm)
- **safety and emc**
- **product numbers**
  - A3700AD: HP Disk Array with AutoRAID deskside version
  - A3700A: HP Disk Array with AutoRAID rackmount version
  - A3700AZ: HP Disk Array with AutoRAID factory-racked version

*Maximum configuration: Model 12H enclosure with 3 power supplies, 3 fans, 12 disks, and 2 controllers.
†Disk manufacturers specify a range of interface transfer rates. Model 12H operates at 20 MB/s.

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