

Data Sheet

Barracuda 7200.11

Proven technology and expert manufacturing deliver up to 1 TB of desktop storage.

**1 TB, 750 GB and 500 GB • 7200 RPM •
SATA 3Gb/s with NCQ and SATA 1.5Gb/s with NCQ**

Key Advantages

- Designed with four disks to provide the optimal balance of advanced technology and low total cost of ownership
- Eleventh-generation drive in the successful, award-winning Barracuda® product family
- Enables up to 1 TB of storage capacity (other capacities at 500 GB and 750 GB)
- Industry's most reliable hard drive with proven second-generation perpendicular magnetic recording (PMR) technology
- Leverages best combination of technology (areal density, PMR) and proven components for volume shipping
- Industry-leading acoustics and power consumption levels
- 105-MB/s sustained data rate
- 32-MB cache

Best-Fit Applications

- Workstations
- Desktop RAID
- Gamer PCs
- High-end PCs
- Mainstream PCs
- USB/FireWire/eSATA personal external storage



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Another Barracuda Generation, Another Successful Product Line

Combining proven components, state-of-the-art technology and expertise in volume manufacturing, the Seagate® Barracuda 7200.11 drive—the eleventh generation of this award-winning desktop hard drive family—delivers up to 1 TB of reliable digital storage.

Seagate has a proven record of delivering reliable products in volume, and the new Barracuda 7200.11 family continues the tradition. Designed with four platters that use the highest areal density available in volume shipping (250 GB/disk) along with second-generation Seagate PMR technology, the Barracuda 7200.11 drive offers the ideal combination of world-class technology and low total cost of ownership. The reliability of this drive, along with its 5-year limited warranty, ensures the longevity and sustainability of digital content for years to come.

With at least 30 percent more PMR drives shipped than the closest competitor, Seagate remains firmly in the leadership position with this capacity- and reliability-boosting technology, and uses second-generation PMR technology to further enhance the Barracuda 7200.11 family.

Capacities up to 1 TB mean that users no longer need to forego storing any digital content, including high-definition video, large multimedia projects and data-heavy CAD files.

Highly leveraged from award-winning PMR technology, the Barracuda 7200.11 drive increases capacity per disk without increasing platter or head count. At the same time, it enhances reliability by decreasing internal components and increasing magnetic stability at high areal densities.

Seagate Global Customer Support

- Get presales and technical support at support.seagate.com.
- Visit our knowledge base for answers to common support questions.
- Find documentation for current and legacy drives.

| Specifications | 1 TB* | 750 GB* | 500 GB* |
|--|---------------------------|---------------------------|---------------------------|
| Model Number | ST31000340AS | ST3750330AS | ST3500320AS |
| Interface Options | SATA 3Gb/s or 1.5Gb/s NCQ | SATA 3Gb/s or 1.5Gb/s NCQ | SATA 3Gb/s or 1.5Gb/s NCQ |
| Performance | | | |
| Transfer Rate, Max Ext (MB/s) | 150/300 | 150/300 | 150/300 |
| Sustained Data Rate OD (MB/s) | 105 | 105 | 105 |
| Cache (MB) | 32 | 32, 16† | 32, 16† |
| Average Latency (ms) | 4.16 | 4.16 | 4.16 |
| Spindle Speed (RPM) | 7200 | 7200 | 7200 |
| Configuration/Organization | | | |
| Heads/disks | 8/4 | 6/3 | 4/2 |
| Bytes per Sector | 512 | 512 | 512 |
| Reliability/Data Integrity | | | |
| Contact Start-Stops | 50,000 | 50,000 | 50,000 |
| Nonrecoverable Read Errors per Bits Read | 1 per 10E14 | 1 per 10E14 | 1 per 10E14 |
| Annualized Failure Rate (AFR) | 0.34% | 0.34% | 0.34% |
| Mean Time Before Failure (MTBF, hours) | 750,000 | 750,000 | 750,000 |
| Limited Warranty (years) | 5 | 5 | 5 |
| Power Management | | | |
| +12 VDC +/-10% (A, peak) | 2.8 | 2.8 | 2.8 |
| Power Management (W) | | | |
| Seek Avg | 11.6 | 11.6 | 10.6 |
| Operating Avg | 12.0 | 12.0 | 11.0 |
| Idle Avg | 8.0 | 8.0 | 8.0 |
| Environmental | | | |
| Temperature (°C) | | | |
| Operating | 0 to 60 | 0 to 60 | 0 to 60 |
| Nonoperating | -40 to 70 | -40 to 70 | -40 to 70 |
| Shock (Gs) | | | |
| Operating: 2 msec | 63 | 63 | 63 |
| Nonoperating: 1 msec | 300 | 300 | 300 |
| Acoustics (bels—sound power)‡ | | | |
| Idle | 2.7 | 2.7 | 2.5 |
| Seek | 2.9 | 2.9 | 2.8 |
| Physical | | | |
| Height (in/mm) | 1.02/26.11 | 1.02/26.11 | 1.02/26.11 |
| Width (in/mm) | 4/101.6 | 4/101.6 | 4/101.6 |
| Depth (in/mm) | 5.78/146.99 | 5.78/146.99 | 5.78/146.99 |
| Weight (lb/kg) | 1.4/0.64 | 1.4/0.64 | 1.2/0.54 |

* One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to hard drive capacity.

† Not available through distribution

‡ Quiet seek specification

www.seagate.com

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