Seagate

Data Sheet

# Barracuda® Green

**Green power that will not slow you down**

## 2 TB, 1.5 TB and 1 TB • SATA 6 Gb/s and SATA 3 Gb/s

### Key Advantages

- A unique 5,900 RPM platform that delivers the fastest performance of any eco-friendly drive available
- Seagate SmartAlign™ technology provides the benefits of the new Advanced Format 4K sector standard without the hassle — no utilities, no extra steps
- Plenty of capacity for storage-hungry applications
- The SATA 6 Gb/s interface and 64 MB cache maximise performance, especially in cache-intensive applications
- Low power consumption, combined with leadership in the use of materials that conform to environmental compliance programmes, means you do not have to sacrifice environmental stewardship for performance
- Cool, quiet operation

### Best-fit Applications

- High-capacity desktop storage
- Direct Attached Storage devices: USB/FireWire/eSATA
- Network Attached Storage devices and Windows storage servers
- Eco-friendly PCs

Think Green™

ADVANCED AF FORMAT

# Barracuda® Green

## Green power that will not slow you down

### Barracuda Green Drives Save Time

The Seagate® Barracuda Green drive saves you time with a combination of fast performance and no-hassle hard drive integration.

- Delivering a sustained data throughput of up to 144 MB/s, the Barracuda Green drive sets a new standard for performance in the eco-drive category.
- Seagate SmartAlign technology delivers a new level of simplicity for Advanced Format 4K drives. While other Advanced Format drives require the use of additional software utilities during integration, the Barracuda Green drive with Seagate SmartAlign technology requires no extra time or steps.

The Barracuda Green drive fulfils the product promise — Green power that will not slow you down!

**seagate.com**
**Toll free: 00 8004 SEAGATE (732 4283)**
**(non toll free: 001 405 324 4714)**

| Specification | 2 TB[1] | 1.5 TB[1] | 1 TB[1] |
|---|---|---|---|
| Model Number | ST2000DL003 | ST1500DL003 | ST1000DL002 |
| Interface Options | SATA 6 Gb/s NCQ | SATA 6 Gb/s NCQ | SATA 3 Gb/s NCQ |
| **Performance** | | | |
| Spindle Speed (RPM) | 5,900 | 5,900 | 5,900 |
| Cache, Multi-segmented (MB) | 64 | 64 | 32 |
| SATA Transfer Rates Supported (Gb/s) | 6.0/3.0/1.5 | 6.0/3.0/1.5 | 3.0/1.5 |
| Average Latency (ms) | 4.16 | 4.16 | 4.16 |
| Average Seek, Typical Read (ms) | 12 | 12 | 12 |
| Average Seek, Typical Write (ms) | 13 | 13 | 13 |
| Power On to Ready (sec) | <17 | <17 | <17 |
| Sustained Data Rate OD (MB/s) | 144 | 144 | 144 |
| **Configuration/Organisation** | | | |
| Bytes per Sector | 4,096 | 4,096 | 4,096 |
| **Voltage** | | | |
| Voltage Tolerance, Including Noise (5V) | +10%/–7.5% | +10%/–7.5% | +10%/–7.5% |
| Voltage Tolerance, Including Noise (12V) | +10%/–7.5% | +10%/–7.5% | +10%/–7.5% |
| **Reliability/Data Integrity** | | | |
| Load/Unload Cycles (25°C, 50% Humidity) | 300,000 | 300,000 | 300,000 |
| Non-recoverable Read Errors per Bits Read, Max | 1 per $10^{14}$ | 1 per $10^{14}$ | 1 per $10^{14}$ |
| Annualised Failure Rate (AFR) | 0.34% | 0.34% | 0.34% |
| Limited Warranty (years) | 3 | 3 | 3 |
| **Power Management** | | | |
| Operating Mode, Typical (W) | 5.8 | 5.8 | 5.8 |
| Idling Mode (W) | 4.5 | 4.5 | 4.5 |
| Standby Mode (W) | 0.5 | 0.5 | 0.5 |
| Sleep Mode (W) | 0.5 | 0.5 | 0.5 |
| Start-up Current +12V Peak (A, ±10%) | 2.0 | 2.0 | 2.0 |
| **Environmental** | | | |
| Temperature | | | |
| Operating (°C) | 0 to 60 | 0 to 60 | 0 to 60 |
| Non-operating (°C) | –40 to 70 | –40 to 70 | –40 to 70 |
| Shock | | | |
| Operating, 2ms (Gs) | 80 | 80 | 80 |
| Non-operating, 2ms (Gs) | 300 | 300 | 300 |
| **Physical** | | | |
| Height (mm/in) | 26.1/1.028 | 26.1/1.028 | 26.1/1.028 |
| Width (mm/in) | 101.6/4.0 | 101.6/4.0 | 101.6/4.0 |
| Depth (mm/in) | 147.00/5.78 | 147.00/5.78 | 147.00/5.78 |
| Weight (g/lb) | 635/1.39 | 635/1.39 | 635/1.39 |

[1] One gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

AMERICAS Seagate Technology LLC 920 Disc Drive, Scotts Valley, California 95066, United States, +1 831 438 6550
ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, +65 6485 3888
EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 16-18 rue du Dôme, 92100 Boulogne-Billancourt, France, +33 1 41 86 10 00

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