

# Capacity-Optimized

Product Overview

## Constellation<sup>®</sup> ES.3

### Enterprise Hard Drive for Bulk-Data Applications

- Maximize your enterprise storage capabilities without expanding your data center.
- Deploy a maximum-capacity enterprise storage solution while lowering your energy costs.
- Improve your data center and RAID uptime while lowering your storage management costs.

### Energy-Efficient High Capacities

- Seagate<sup>®</sup> Constellation ES.3 drives operate on average at fewer than 11.86W—one of the lowest 4TB\* drive operating power in the industry. Save up to 54% more by implementing Seagate PowerChoice™ technology's on-demand idle power savings feature.
- Maximize data center footprint utilization by supporting up to 152TB per square foot.



# Capacity-Optimized Constellation® ES.3



## Reliable, Always-Available Storage for Your 24x7 World

- 1.4M hours MTBF and 0.63% AFR deliver the highest level of reliability for a 24x7 capacity-optimized drive.
- Data is stored accurately with SAS-based advanced error correction capabilities.
- Chassis performance is improved through top-cover attached (TCA) motor design and robust enterprise features, including super parity and humidity sensor.
- Best-in-class vibration tolerance ensures consistent, reliable data access and performance in multi-drive systems.

## The Seagate Advantage

Built upon leading experience in enterprise storage, the Constellation ES.3 drive maximizes capacity while providing best-in-class features.

The Constellation ES.3 drive significantly improves Tier 2 storage performance in both SAS and SATA interfaces.

The Self-Encrypting Drive (SED) option helps companies achieve corporate and/or government security compliance goals. The drive helps protect data from inadvertent change from the moment of creation until the end of life, and the Seagate Instant Secure Erase feature makes drive retirement and repurposing safe, fast and affordable. The FIPS Self-Encrypting Drive option meets regulatory data security compliance requirements and is FIPS 140-2 Validated to protect Sensitive but Unclassified and Protected class data.†

## Designed for Your Growing Needs

Ideally suited for use in both server and networked storage bulk-data and RAID solutions, the capacity-optimized Constellation ES.3 drive offers a host of impressive enterprise features along with a faster, more successful integration experience.

The Constellation ES.3 drive, with its maximum capacity and robust enterprise reliability, provides a sustainable solution for your expanding data storage needs; designed to meet and exceed your expectations, it allows you to come in under power and under budget.

\*Seagate recommends validating your configuration with your HBA/RAID controller manufacturer to ensure full capacity capabilities.

†FIPS 140-2 in review. See FIPS 140-2 Level 2 Certificate at <http://csrc.nist.gov/groups/STM/cmfp/documents/140-1/1401val2011.htm#1635>

Specifications	
Capacities <sup>1</sup>	4TB, 3TB, 2TB and 1TB
Interface	6Gb/s SAS and SATA 6Gb/s
Sustained Data Rate	up to 175MB/s
Cache	128MB
Spindle Speed	7200 RPM
Reliability (MTBF)	1.4M hours
Operating Power	less than 11.86W
Limited Warranty <sup>2</sup>	5 years

1 One terabyte, or TB, equals one trillion bytes when referring to drive capacity.

2 Capacity-optimized products shipped between December 31, 2011, and June 30, 2012, have a 3-year limited warranty. Capacity-optimized products shipped before December 31, 2011, or after June 30, 2012, have a 5-year limited warranty.

[www.seagate.com](http://www.seagate.com)



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