# Capacity-Optimised

**Product Overview**

## Constellation® ES.3

### TB capacity-optimised enterprise hard drive for bulk data applications

- Maximise your enterprise storage capabilities without expanding your data centre

- Deploy a maximum-capacity enterprise storage solution while lowering your energy costs

- Improve your data centre uptime while lowering your storage management costs

### Energy-Efficient High Capacities

- Constellation ES.3 drives operate on average at under 11.86W — the lowest 4 TB* drive operating power in the industry.  Save up to 54% more by implementing Seagate PowerChoice™ technology's on-demand idling power savings feature.

- Maximise data centre footprint usage by supporting up to 152 TB per square foot.

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## Constellation® ES.3

**Seagate** ®

## Reliable, Always-Available Storage for Your 24×7 World

- 1.4M hours MTBF and 0.63% AFR deliver the highest level of reliability for a 247 capacity-optimised 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 on leading experience in enterprise storage, the Constellation ES.3 drive maximises 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 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-optimised 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[1] | 4 TB, 3 TB and 1 TB |
| Interface | 6 Gb/s SAS and SATA 6 Gb/s |
| Sustained Data Rate | up to 175 MB/s |
| Cache | 128 MB |
| Spindle Speed | 7,200 RPM |
| Reliability (MTBF) | 1.4M hours |
| Operating Power | less than 11.86W |
| Limited Warranty | 5 years |

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

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

**6Gb/s** Serial Attached SCSI

**SERIAL ATA**

## www.seagate.com