

Ultrastar® He⁶

3.5-Inch Helium Platform Enterprise Hard Drive

Innovation for Next-generation, High-density Data Centers



HGST delivers the world's first hermetically sealed, helium hard drive, the Ultrastar® He⁶ for massive scale-out environments. Why does helium make a difference? Helium has only one-seventh the density of air. Replacing air with helium inside a hard drive dramatically reduces the turbulence caused by the spinning disk, cuts power consumption and results in a lower temperature within the disk drive.

The reduction in turbulence for the spinning disk allows HGST to offer a seven-disk design in a traditional 3.5-inch form factor. In addition to being the world's first helium-filled hard drive, HGST Ultrastar He⁶ is also the first hard drive in the industry to offer a 6 terabyte¹ capacity. This design offers a 50% capacity gain and still reduces the energy needed to run the drive by up to 23%.

TCOptimized™ - Driving Down Data Center TCO with Helium

The amount of data that companies need to store is growing exponentially, but IT budgets remain flat. With 6TB, a low 5.3 idle watts, a reduced weight of 640g, and running at 4-5°C cooler, the new Ultrastar He⁶ lowers data center TCO on virtually every level. Key TCO benefits when compared to a typical 3.5-inch, five-platter, air-filled 4TB drive* include:

50% more capacity	23% lower idle power	49% better watts/TB	30% quieter operation	4°C cooler operation	50g lighter weight
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Technology Innovations Make it Happen



HelioSeal™

Innovative and patented technology to hermetically seal helium in the HDD

7Stac™

Proprietary high-density 7 disks packed in a standard 1-inch high form factor for 3.5-inch HDDs



Choose Ultrastar He⁶ for these Enterprise Applications & Environments

- High-density data centers
- Massive scale-out data centers
- Containerized data centers
- Nearline storage applications
- Bulk storage
- Enterprise and data center applications where density and capacity are paramount

Key Specifications

- Capacity¹: 6TB
- Interface: SAS & SATA 6Gb/s
- MTBF²: 2M hours
- Warranty: 5-year limited
- Form Factor: Industry standard 3.5-inch HDD
- Idle Power: 5.3W
- Weight: 640g
- Acoustics (Idle): 2.0Bels

* Measurements shown reflect improvements when comparing SATA models of a 4TB Ultrastar 7K4000 and 6TB Ultrastar He⁶.

¹ One gigabyte (GB) is equal to one billion bytes, one terabyte (TB) equals 1,000GB (one trillion bytes), and one petabyte (PB) equals 1,000TB (one quadrillion bytes) when referring to hard drive or solid state drive capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the drive, the computer's operating system, and other factors.

² MTBF target is based on a sample population and is estimated by statistical measurements and acceleration algorithms under nominal operating conditions. MTBF ratings are not intended to predict an individual drive's reliability. MTBF does not constitute a warranty. Ultrastar, HelioSeal and 7Stac are trademarks or registered trademarks of HGST, Inc. and its affiliates in the United States and/or other countries.