

# Hitachi Unleashes Ultra-Fast Half-Terabyte Mobile Hard Disk Drive

September 1 2009

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Hitachi today announced that is it shipping its fifth-generation, 7200 RPM mobile hard disk drive. The Hitachi Travelstar 7K500 is a 500GB, 2.5-inch, 3Gb/s SATA drive designed for notebooks, gaming systems and professional external storage solutions.

The new Travelstar 7K500 is the fastest hard drive in its class and delivers up to 56 percent higher capacity and 16 percent better application performance than its predecessor. It also provides best-of-breed operating shock and outstanding power management for sturdy, unplugged notebook performance.

“Portable PC shipment growth continues to be one of the most significant market drivers underpinning 2.5-inch disk drive demand, and is a major reason why IDC expects the 2.5-inch mobile HDD market will grow at a 16.8 percent 2008-2013 compound annual growth rate,” said John Rydning, research director for hard disk drives at IDC.

“[Hitachi](#)’s new 500GB mobile 2.5-inch HDD with a 7,200 rpm spin-speed provides PC OEMs an opportunity to differentiate PCs with both capacity and performance.”

Due to their value and portability, notebooks and external storage devices are highly susceptible to theft. If those devices fall in the wrong hands, sensitive data stored on the drive could become compromised. To help combat this issue, Hitachi GST has been providing hardware-based Bulk Data Encryption (BDE) as an option on its Travelstar mobile hard drives for four generations. Travelstar 7K500 is compliant with the

Trusted Computing Group's (TCG) Opal storage security specification, a new open standard designed to strengthen data protection and safeguard notebooks in the event of system loss or theft.

When the Hitachi BDE option is enabled, the hard drive will encrypt all data that comes from the system as it is written to the media. When read back, the drive decrypts the data so that it can be understood by the system. Since the hard drive is doing the encryption work, there is no impact on system performance. A Hitachi [hard drive](#) with BDE is always automatically encrypting data, so the system user never has to worry about whether or not the data is being protected. For commercial or corporate IT managers with a large pool of systems, BDE also speeds up and simplifies the drive re-deployment process. By deleting the encryption key, the data is rendered unreadable, thereby eliminating the need for time-consuming data-overwrite.

Travelstar 7K500 has been designed for energy efficiency with superior low power consumption at 0.69 watts idle power and 1.8 watts during read/write operations, which contributes to longer battery life in notebooks and other mobile applications. The Travelstar 7K500 is also the latest drive to be distinguished by the Hitachi EcoTrac classification due to its low power, halogen-free design, RoHS compliance and steps in eco-friendly product design, manufacturing, operation and disposal.

Travelstar 7K500 is now shipping in limited quantities to top tier OEMs. Volume shipments will begin this month. Capacities include 120GB, 160GB, 250GB, 320GB and 500GB. Hitachi will offer an enhanced-availability (EA) version, available in 160GB to 500GB capacities in November '09. The EA version is specifically designed for applications requiring 24x7 operation in lower transaction environments, such as blade servers, network routers and surveillance systems.

Source: Hitachi

Citation: Hitachi Unleashes Ultra-Fast Half-Terabyte Mobile Hard Disk Drive (2009, September 1) retrieved 26 April 2024 from

<https://phys.org/news/2009-09-hitachi-unleashes-ultra-fast-half-terabyte-mobile.html>

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