

Travelstar™ 7K200

PLATINUM CLASS OF NOTEBOOK HARD DRIVES

HITACHI
Inspire the Next

High-capacity, high-performance notebook drive with optional data encryption technology

Highlights

- > At 200GB¹, the highest capacity 7200 RPM 2.5-inch drive
- > Third-generation PMR technology
- > Best application performance in PCMark testing
- > Industry-leading operating shock of 350G
- > Lowest 7200 RPM power consumption, comparable to 5400 RPM
- > Low acoustics, comparable to 5400 RPM
- > Serial ATA 3 Gb/s & 1.5 Gb/s
- > New security option: Bulk Data Encryption

Applications

- > Notebook PCs
- > Gaming devices
- > Compact desktop systems
- > Graphics and CAD workstations
- > Video editing



200, 160, 120, 100 and 80 GB | 7200 RPM
SATA 3 Gb/s and 1.5 Gb/s

Features and Benefits

	Feature / Function	Benefits
Performance	Up to 876 MB/s media transfer rate	18-33% faster application performance in PCMark testing than competitive 7200 & 5400 RPM 2.5" HDDs
	16 MB cache buffer	Optimizes read/write response times
Power	5400 RPM parity	No need to trade-off battery life for performance
Reliability	350G operating shock 1000G non-operating shock	Best protection against bumps and rough handling
	Thermal Fly-height Control (TFC)	Better soft error rate for improved reliability and performance
	TrueTrack Technology™	Tracking accuracy in high shock or vibration environments
Acoustics	Quiet acoustics	Richer audio-listening experience for music, movies and games
Interface	SATA 3 Gb/s & 1.5 Gb/s	High data throughput
Security	Bulk Data Encryption option (Available with 1.5Gb/s SATA on specific part numbers)	Helps guard against data loss & piracy

Superior performance requires no sacrifice

The Hitachi Travelstar™ 7K200 is the Industry's only third-generation 7200 RPM notebook hard drive. It delivers double the capacity and a 22% performance improvement over its predecessor. At 200GB, Hitachi offers the highest capacity 7200 RPM 2.5-inch product with unmatched performance in PCMark testing. Despite the higher spin speed, the 7K200 offers comparably low power consumption, heat emission and acoustics to its 5400 RPM counterparts, so users don't have to trade off battery life or audio quality for high performance. In addition, with its new higher shock specifications, and optional Bulk Data Encryption on specific part numbers, Travelstar 7K200, is designed for the most discriminating notebook users.

Bulk Data Encryption

Travelstar 7K200 is Hitachi's first hard drive with optional disk level Bulk Data Encryption to help guard against data loss and piracy. This new technology, where data is scrambled using an encryption key as it is written to the disk then descrambled with the key as it's retrieved, gives users a higher level of data protection than traditional password-based security available today. An additional benefit of Bulk Data Encryption is speeding and simplifying the drive re-deployment process. By deleting the encryption key, the data is rendered unreadable, thereby eliminating the need for data-erasure.

Specifications

Model(s)	HTS722020K9A300 HTS722016K9A300 HTS722012K9A300 HTS722010K9A300 HTS722080K9A300	HTS722020K9SA00 HTS722016K9SA00 HTS722012K9SA00 HTS722010K9SA00 HTS722080K9SA00
Interface	SATA 3 Gb/sec	SATA 1.5 Gb/sec
Capacity (GB) ¹	200 / 160 / 120 / 100 / 80	←
Sector size (bytes)	512	←
Recording zones	24	←
Data heads (physical)	4 / 4 / 3 / 2 / 2	←
Data disks	2 / 2 / 2 / 1 / 1	←
Max. areal density (Gbits/sq. inch)	164 / 132 / 132 / 164 / 132	←
Performance		
Data buffer (MB) ²	16	←
Rotational speed (RPM)	7200	←
Latency average (ms)	4.2	←
Media transfer rate (Mbits/sec, max)	876 / 695 / 695 / 876 / 695	←
Seek time (read, typical) (avg. ms) ³	10	←
Track to track (read, typical) (avg. ms)	1	←
Full stroke	18	←
Reliability		
Load/unload	600,000	←
Power		
Requirement	+5 VDC (+ -5%)	←
Startup (W, peak, max.)	5.5	←
Seek (W, avg.)	2.6	←
Read / Write (W, avg.)	2.3	←
Performance idle (W, avg.)	2.0	←
Active idle (W, avg.)	1.0	←
Low power idle (W, avg.)	0.8	←
Standby (W, avg.)	0.25	←
Sleep (W)	0.2	←
Physical size		
z-height (mm)	9.5 mm	←
Dimensions (width x depth, mm)	70 x 100	←
Weight (max, g)	115 / 115 / 115 / 110 / 110	←
Environmental (Operating)		
Shock (half-sine wave)	350G / 2ms, 180G / 1ms	←
Ambient temperature	5 to 55° C	←
Environmental (Non-operating)		
Shock (half-sine wave)	1000G / 1ms	←
Ambient temperature	-40 to 65° C	←
Acoustics (A-weighted sound power)		
Idle (typical)	2.5 / 2.5 / 2.5 / 2.2 / 2.2	←
Seek (typical)	2.9 / 2.9 / 2.9 / 2.6 / 2.6	←

Hitachi quality and service

Hitachi Travelstar mobile hard disk drives are designed to the highest quality standards and contain field-proven components. Hitachi provides worldwide technical support and integration services to enable global customers to bring their products to market quickly.

How to read the Travelstar model number

HTS722020K9A300 = 200 GB, SATA 3 Gb/s

H = Hitachi

T = Travelstar

S = Standard (vs C for Compact)

72 = 7200 RPM

20 = Full capacity — 200 GB

20 = Capacity this model, 20 = 200 GB (16 = 160 GB, 12 = 120 GB, 10 = 100 GB, 80 = 80 GB)

K = Generation code

9 = 9.5mm z-height

A3 = Interface, SATA 3 Gb/s (SA = 1.5 Gb/s)

0 = Reserved

0 = Reserved

Information and Technical Support

www.hitachigst.com (Main Web site)

www.hitachigst.com/partners (Partner Web site)

North America

support_usa@hitachigst.com

Toll free: 1 888 426-5214, Direct: 1 507 322-2370

Asia Pacific

support_ap@hitachigst.com / 65 6840 9595

EMEA and UK

support_uk@hitachigst.com / 44 20 7133 0032

Germany

support_uk@hitachigst.com / 49 6929 993601

Program Support

Partners First™ Program

channelpartners@hitachigst.com

¹ One GB is equal to one billion bytes when referring to hard drive capacity. Accessible capacity may be less.

² Upper 705KB out of 16MB used for firmware

³ Excludes command overhead

Hitachi Global Storage Technologies' trademarks are authorized for use in countries and jurisdictions in which Hitachi Global Storage Technologies has the right to use, market and advertise the brands. The Travelstar trademark is authorized for use in the Americas, EMEA, and the following Asia-Pacific countries and jurisdictions: Australia, Hong Kong, Japan, New Zealand, South Korea and Taiwan. Contact Hitachi Global Storage Technologies for further information. Hitachi Global Storage Technologies shall not be liable to third parties for unauthorized use of Hitachi Global Storage Technologies trademarks.

References in this publication to Hitachi Global Storage Technologies' products, programs, or services do not imply that Hitachi Global Storage Technologies intends to make these available in all countries in which it operates. Some countries have laws that may affect encryption-enabled devices. Hitachi GST assumes no responsibility for compliance with laws that apply to our products after they are sold or outside of our control. Accordingly, we suggest that you review all laws of the countries where you conduct business.

Product specifications provided are sample specifications and do not constitute a warranty. Information is true as of the date of publication and is subject to change. Actual specifications for unique part numbers may vary. Please visit the Support section of our website, www.hitachigst.com/support, for additional information on product specifications. Photographs may show design models.

© 2007 Hitachi Global Storage Technologies

Hitachi Global Storage Technologies
3403 Yerba Buena Road
San Jose, CA 95135 USA

Produced in the United States 5/07, revised 9/07
All rights reserved.

Partners First™ is a trademark of Hitachi Global Storage Technologies.