

Travelstar® 7K1000

2.5-Inch Mobile 7200 RPM 9.5mm Hard Disk Drives

Highlights

- Up to 1TB¹ of capacity
- Advanced Format, industry standard 4K sector size
- 512 byte emulation (512e)
- 7200 RPM high-performance HDD
- 6Gb/s SATA interface
- · Low power consumption
- Halogen-free for eco-friendly design
- Self-encrypting models for data security
- Enhanced availability (EA) models for applications needing around-the-clock access in lower-transaction environments

Applications/Environments

- Notebook PCs
- External storage
- Compact desktop PCs
- · Gaming PCs
- · Small-form-factor video devices
- · Blade servers (EA)
- Network routers (EA)
- · Video surveillance (EA)

High Performance and High Capacity for Mobile Platforms

Travelstar® 7K1000 is the industry's only seventh-generation 7200 RPM mobile hard drive and ideally suited for notebook PC upgrades and portable, high-capacity personal storage products. At 500GB/platter, this 2.5-inch hard drive offers up to 1TB capacity and leverages Advanced Format, which increased the physical sector size from 512 bytes to 4,096 (4K) bytes to improve drive capacities and error correction capabilities. The Travelstar 7K1000 is the industry's first high-performance 1TB 2.5-inch HDD with a 6Gb/s SATA interface and delivers the highest mobile HDD performance in PCMark® Vantage benchmark testing.

HGST provides best-of-breed operating shock and outstanding power management in Travelstar 7K1000 for sturdy unplugged notebook performance. Highlights include proven seventh-generation technology, 1TB capacity, low power consumption, industry's highest shock tolerance, halogen-free design for an eco-friendly footprint and Serial ATA 6Gb/s for high data throughput. Some models offer HGST Bulk Data Encryption, delivering a self-encrypting drive (SED) with hardware-based data security. These SED models provide one of the highest levels of data protection available.

The Travelstar 7K1000 allows manufacturers to deliver high-capacity, power-efficient systems with desktop-like performance. Manufacturers can consult the HGST Advanced Format Technology Brief for more information on using these hard drives. The 7K1000 continues HGST's tradition of ecological leadership and carries its EcoTrac classification. Travelstar 7K1000 delivers speed and capacity, without sacrificing battery life or audio quality, to meet the multi-tasking demands of commercial and consumer users on the go.

Enhanced Availability (EA) – for 24x7 Access to Data

HGST provides enhanced availability models of the Travelstar 7K1000 that allow 24x7 access to data to support applications that require around-the-clock operation. The 7K1000 provides high capacity, durability and low power utilization on a proven platform for quality and reliability. EA models support the stringent demands of "always-on" application in lower-transaction environments.

Features and Benefits

	Feature / Function	Benefits			
Capacity	Up to 1TB storage	Up to 250 hours of high-definition video, 1000 hours of standard video, 350 movies, 250,000 4-min songs or 500 games *			
Performance	Up to 1284Mb/s media transfer rate	Faster downloads and better application performance than 5400 RPM models at same capacity			
Power	1.8W read/write power 08W low power idle	Low energy use and long battery life for more "unplugged" notebook time			
Reliability	400G 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			
	TrueTrack™ technology	Tracking accuracy in high shock or vibration environments			
Acoustics	Quiet acoustics	Richer audio-listening experience for music, movies and games			
Interface	SATA 6Gb/s	High data throughput			
Security Option	Bulk Data Encryption	Helps guard against data theft			

^{*} Actual storage may vary depending on the compression rate applied. Capacities may not be combined









HGST Quality and Service

HGST Travelstar hard disk drives are designed to the highest quality standards and contain field-proven components. HGST 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

HTS721010A9E630 = 1TB, SATA 6Gb/s

H = HGST

Т = Travelstar

S = Standard (E = EA)

72 = 7200 RPM

10 = Full capacity - 1TB

= Capacity this model, 10 = 1TB (75 = 750GB) 10

Α = Generation code

9 = 9.5mm z-height

E6 = SATA 6Gb/s with 512 emulation

3 = 32MB cache

0 = No encryption (1 = Bulk Data Encryption)

Information and Technical Support

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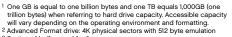
Program Support

Partners First Program channelpartners@hgst.com

Specifications	Standard Models	EA Models	
Model # / Part #	1TB HTS721010A9E630 / 0J22423	HTE721010A9E630 / 0J30573	

HTS721010A9E631 / 0J22428

	750GB	HTS721075A9E630 / 0J22422 HTS721075A9E631 / 0J22427		
Configuration				
Interface		SATA 6Gb/s	←	
Capacity (GB) ¹		1TB / 750GB	1T	В
Sector size (bytes) ²		512e	←	
Recording zones		30	←	
Aerial density (max, Gbit/sq.in.)		676	←	
Performance				
Data buffer (MB) ³		32	←	
Rotational speed (RPM)		7200	←	
Latency average (ms)		4.2	←	
Media transfer rate (max, Mbits/s	s)	1284	←	
Interface transfer rate (MB/s)		600	←	
Seek time Average (typical) ms (read) ⁴		12	←	
Track to track (typical) ms (rea	ıd)	1	←	
Full stroke (typical) ms (read)		20	←	
Reliability				
Load/Unload cycle		600,000	←	
Power on hours (POH) per mont	h	N/A	73	30
Availability ⁵		N/A	24	1x7
Power				
Requirement		+5VDC (+-5%)	←	
Dissipation Startup (W, peak, max)		5.5	←	
Seek (W, average)		2.1	←	
Read/Write (W, average)		1.8	←	
Performance idle (W, average)		1.7	←	Idle (W, average)
Active idle (W, average)		1.0	N/	
Low power idle (W, average)		0.8	N/	/ A
Standby (W, average)		0.2	←	
Sleep (W)		0.1	←	
Physical size				
Height (max, mm)		9.5	←	
Dimensions (width x depth, mm)		70 x 100	←	
Weight (max, g)		115	←	
Environmental (operating)				
Shock (half-sine wave)		400G/2ms, 225G/1ms	←	
Ambient temperature		0° - 60° C	←	
Environmental (non-operating)				
Shock (half-sine wave)		1000G/1 ms	←	
Ambient temperature		-40° - 65° C	←	
Acoustics (A-weighted sound pow	er)		←	
Idle (Bels, typical)		2.5	←	
Seek (Bels, typical)		2.7	←	
1				



⁵ Designed for low duty cycle, non mission-critical applications in PC, nearline and consumer electronics environments, which vary application to application



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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.hgst.com/support, for additional information on product specifications. Photographs may show design models.

³ Portion of buffer used for firmware

⁴ Excludes command overhead