# Travelstar™ 5K750 2.5-Inch Mobile 5400 RPM 9.5mm Hard Disk Drives

### **Highlights**

- Up to 750GB<sup>1</sup> of capacity
- Advanced Format, industry standard 4K sector size
- 512 byte emulation (512e)
- 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
- Gaming PCs
- Small-form-factor video devices
- Blade servers (EA)
- Network routers (EA)
- Video surveillance (EA)

### High-Capacity Storage Paves the Way for New Mobile Platforms

Travelstar<sup>™</sup> 5K750 is a 5400 RPM, 375GB/platter, 2.5-inch hard drive with capacities of 500GB, 640GB and 750GB. This standard 9.5mm, two-disk design, intended for use in notebook PCs, external storage, gaming consoles and other mobile applications, is HGST's first to leverage Advanced Format. Advanced Format increases the physical sector size on hard drives from 512 bytes to 4096 (4K) bytes, which increases drive capacities and improves error correction capabilities. The Travelstar 5K750 allows manufacturers to deliver high-capacity, power-efficient systems. Manufacturers can consult the HGST Advanced Format Technology Brief for more information on using these hard drives. The 5K750 continues to demonstrate HGST's ecological leadership, with its halogen-free and low-power products, and carries the EcoTrac classification. Travelstar 5K750 delivers the balance of capacity, ruggedness and low-power to meet the needs of consumers and commercial users in an eco-friendly design.

### **Encryption Option**

Travelstar 5K750 is the fifth generation self-encrypting drive (SED) to feature HGST's Bulk Data Encryption. The SED encrypts data using protected keys in real time, providing users the highest level of data protection available. It also speeds and simplifies drive re-purposing. By deleting the encryption key, the data on the drive is rendered unreadable, thereby eliminating the need for time-consuming data-overwrite. For information about the SED models designed to the Trusted Computing Group (TCG) Opal Storage Security specification, please contact your HGST representative.

## Enhanced Availability (EA)—For 24x7 Access to Data

HGST provides enhanced availability models that allow the Travelstar 5K750 to deliver 24x7 access to data for data-intensive applications requiring round-the-clock operation. The 5K750 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" applications in lower-transaction environments.

### Features and Benefits

	Feature / Function	Benefits	
Capacity	Up to 750GB storage	Up to 187 hours of high-definition video, 750 hours of standard video, 260 movies, 188,000 4-min songs or 375 games *	
Power	1.4W read/write power 0.5W low power idle	Lowest 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	
Performance	Up to 996Mb/s media transfer rate	Excellent application performance in PCMark Vantage testing	
Acoustics	Quiet acoustics	Richer audio-listening experience for music, movies and games	
Interface	SATA 3Gb/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.



750GB, 640GB and 500GB 5400 RPM | SATA 3Gb/s





# Travelstar™ 5K750

**EA Models** 

Standard Models

## **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

HTS547575A9E384 = 750GB, SATA 3Gb/s

- H = HGST T = Travelstar
- S = Standard (vs E for Enhanced Availability)
- 54 = 5400 RPM
- 75 = Full capacity 750GB
- 75 = Capacity this model, 75 = 750GB (64 = 640GB, 50 = 500GB) A = Generation code
- 9 = 9.5mm z-height
- E3 = SATA 3Gb/s with 512 emulation
- 8 = 8MB cache
- 4 = No encryption (1 = Bulk data encryption, 5 = TCG Opal Encryption)

## Information and Technical Support

www.hgst.com (Main Web site) www.hgst.com/partners (Partner Web site)

#### North America

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Asia Pacific

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#### Program Support

Partners First Program channelpartners@hgst.com



specifications	Standard Models	EA MOUEIS
Models	HTS547575A9E384 HTS547575A9E381 HTS547564A9E384 HTS547564A9E381 HTS547550A9E384 HTS547550A9E384 HTS547550A9E381	HTE547575A9E384 HTE547564A9E384 HTE547550A9E384
Configuration		
Interface	SATA 3Gb/s	<del>~</del>
Capacity (GB) <sup>1</sup>	750 / 640 / 500	<del>~</del>
Sector size (bytes) <sup>2</sup>	512e	÷
Recording zones	24	÷
Aerial density (Gbit/sq.in, max)	472	÷
Performance		
Data buffer (MB) <sup>3</sup>	8	<del>~</del>
Rotational speed (RPM)	5400	<del>~</del>
Latency average (ms)	5.5	<del>~</del>
Media transfer rate (Mbits/s, max)	996	<del>~</del>
Interface transfer rate (MB/s)	300	←
Seek time	10	,
Average (typical) ms (read) <sup>4</sup>	12	<i>←</i>
Track to track (typical) ms (read)	1	←
Full stroke (typical) ms (read)	20	<b>←</b>
Reliability		
Load/Unload cycle	600,000	<del>~</del>
Power on hours (POH) per month	N/A	730
Availability <sup>5</sup>	N/A	24x7
Power		
Requirement	+5VDC (+-5%)	<del>~</del>
Dissipation Startup (W, peak, max)	4.5	←
Seek (W, average)	1.7	←
Read/Write (W, average)	1.4	←
Performance idle (W, average)	1.5	← Idle (Avg.)
Active idle (W, average)	0.8	N/A
Low power idle (W, average)	0.5	N/A
Standby (W, average)	0.2	<del>~</del>
Sleep (W)	0.1	<del>~</del>
Physical size		
Height (mm, max)	9.5	←
Dimensions (width x depth, mm)	70 x 100	←
Weight (g, max)	102	←
Environmental (operating)		
Shock (half-sine wave)	400G/2ms, 225G/1ms	←
Ambient temperature	0° to 60° C	←
Environmental (non-operating)	0 10 00 0	
Shock (half-sine wave)	1000G/1 ms	←
Ambient temperature	-40° o 65° C	←
Anoient temperature Acoustics (A-weighted sound power)		•
Idle (Bels, typical)	2.4	←
	2.5	← ←
Seek (Bels, typical) 1 One GB is equal to one billion bytes when referring to hard drive capacity. Accessible capacity will vary depending on the operating environment and formatting. 2 Advanced Format drive: 4K physical sectors with 512 byte emulation 3 Portion of buffer used for firmware	<ul> <li>2.5</li> <li>4 Excludes command overhead</li> <li>5 Designed for low duty cycle, non mis nearline and consumer electronics e application to application</li> </ul>	sion-critical applications in PC,

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The EcoTrac symbol identifies HGST hard drives that deliver on the principles of lower operating costs, safer product disposal and a more sustainable environment.

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Please visit the Support section of our website, www.hgst.com/support, for additional information on product specifications. Photographs may show design models.