

Travelstar™ E5K250

2.5-INCH HARD DISK DRIVES

HITACHI
Inspire the Next

Enhanced Availability (EA) storage for 24 x 7 access to data

Highlights

- > Capacity range up to 250GB¹
- > Highest 5400 RPM application performance in PCMark testing
- > Industry-leading operating shock of 400G
- > Best-of-breed low power consumption
- > Serial ATA 3Gb/s
- > Designed for applications needing around-the-clock access in lower transaction environments

Applications

- > Blade servers
- > Network routers
- > Point-of-sale terminals
- > Web hosting
- > Video surveillance



250, 160, 120 and 80GB | 5400 RPM
SATA 3Gb/s

Features and Benefits

	Feature / Function	Benefits
Capacity	Up to 250GB of storage	High-capacity storage in 2.5" form factor * Capacity equivalence of 250 hours of video
Performance	Up to 665Mb/s media transfer rate	10-25% faster application performance than competitive 5400 RPM in PCMark testing
Power	1.8W read/write power	Industry-leading power management for minimum current draw
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 and performance
	TrueTrack Technology™	Tracking accuracy in high shock or vibration environments
Acoustics	Quiet acoustics	Nearly inaudible operation
Interface	SATA 3Gb/s	High data throughput

*Actual storage may vary depending on the compression rate applied.

Balanced capacity and performance for mobile computing

The Travelstar™ E5K250 is Hitachi's highest capacity, 5400 RPM hard drive with enhanced availability. With more than a 56% capacity improvement and 8% better application performance than its predecessor, this drive can support the demands of "always-on" applications in lower transaction settings. The E5K250 offers a maximum capacity of 250GB with best-of-breed performance in PCMark testing. Travelstar E5K250, with outstanding power management, delivers the lowest 5400 RPM power consumption and draws minimum current. Hitachi has improved the shock performance of the E5K250 by almost 23% to an industry-leading 400G, enhancing its ability to withstand rough handling. The acoustics have also been improved over the previous generation product, allowing its operation to be nearly inaudible to the human ear. Travelstar E5K250 is designed to address the needs for high-capacity, rugged storage for non-stop environments.

Around-the-clock data operation

Hitachi employs specific microcode to allow the Travelstar E5K250 to deliver 24 x 7 access to data. These models broaden the product line to make it more suitable for data intensive applications requiring round-the-clock operation. Travelstar E5K250 provides leadership capacity, performance, durability and power utilization on a proven platform for quality and reliability. The E5K250 can support the stringent demands of "always-on" applications in lower transaction environments.

Specifications

Model(s)	HTE542525K9A300 HTE542516K9A300 HTE542512K9A300 HTE542580K9A300
Interface	SATA 3Gb/sec
Capacity (GB) ¹	250 / 160 / 120 / 80
Sector size (bytes)	512
Recording zones	24
Data heads (physical)	4 / 3 / 2 / 2
Data disks	2 / 2 / 1 / 1
Max. areal density (Gbits/sq. inch)	205
Performance	
Data buffer (MB) ²	8
Rotational speed (RPM)	5400
Latency average (ms)	5.5
Media transfer rate (Mbits/sec, max)	665
Interface Transfer Rate (MB/sec, max)	300
Seek time (read, typical) (avg. ms) ³	11
Track to track (read, typical) (avg. ms)	1
Full stroke	20
Reliability	
Load/unload	600,000
Power on hours (POH) per month	730
Availability ⁴ (hrs/day x days/wk)	24x7
Power	
Requirement	+5 VDC (+ -5%)
Startup (W, peak, max.)	5.0
Seek (W, avg.)	2.2
Read / Write (W, avg.)	1.8
Idle (W, avg.)	1.7
Standby (W, avg.)	0.2
Sleep (W)	0.1
Physical size	
z-height (mm)	9.5mm
Dimensions (width x depth, mm)	70 x 100
Weight (max, g)	102 // 95
Environmental (Operating)	
Shock (half-sine wave)	400G / 2ms, 200G / 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)	2.4
Seek (typical)	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

HTE542525K9A300 = 250GB, SATA 3Gb/s

H = Hitachi

T = Travelstar

E = Enhanced Availability (vs S for Standard)

54 = 5400 RPM

25 = Full capacity—250GB

25 = Capacity this model, 25 = 250GB

(16 = 160GB, 12 = 120GB, 80 = 80GB)

K = Generation code

9 = 9.5mm z-height

A3 = Interface, SATA 3Gb/s

0 = Reserved

0 = Reserved

Information and Technical Support

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

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Program Support

Partners First™ Program

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

² Upper 736KB out of 8MB used for firmware.

³ Excludes command overhead.

⁴ Intended for low duty cycle, non mission-critical applications in PC, nearline, and consumer electronics environments, which vary from application to application.

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