

Travelstar™ 7K100

2.5-INCH HARD DISK DRIVES

HITACHI
Inspire the Next

High performance, industrial-strength 2.5-inch hard drives

Highlights

- > Desktop-like performance in a mobile drive
- > Enhanced ABLE™ for maximum battery utilization
- > Industry-leading robustness in both non-op and operating shock
- > Optimized femto actuator/suspension design
- > Parallel and Serial ATA interfaces on all models
- > Serial ATA 1.5 Gb/s with Native Command Queuing, Hot Plug and Staggered Spin-up
- > RoHS compliant

Applications

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



100GB, 80GB, and 60GB
7200 RPM | ATA-6 and
SATA1.5Gb/sec

Features and Benefits

	Feature / Function	Benefits
Capacity	100GB	Leadership capacity in a standard 2.5" form factor
Performance	Up to 629Mb/sec media transfer rate Optimized caching	Blazing performance, smoother playing video, gaming and multimedia applications
Reliability	300G operating shock 1000G non-operating shock	Exceptional tolerance of rough handling and improved durability
	600,000 load/unload cycles	Reduces disk wear and protects user data
	TrueTrack Technology™	Tracking accuracy in high shock or vibration environments
Acoustics	Enhance mechanical design Fluid Dynamic Bearing Motors (FDB)	Whisper-quiet operation
Power	0.85W low power idle Enhanced Adaptive Battery Life Extender™ (ABLE)	Maximum power efficiency for longer battery life
Interface	Parallel ATA	Mainstream and legacy applications
	Serial ATA 1.5 Gb/s	With NCQ, Hot Plug, Staggered Spin-up, and other SATA extensions

Unparalleled leadership

The Travelstar 7K100 is Hitachi's second generation 7200 RPM 2.5-inch hard drive which offers leading-edge capacity, performance, durability and power utilization on a proven product platform. With its 100GB capacity, the 7K100 provides 66% more storage space as well as a 33% boost in sustained data rate over the record-setting Travelstar 7K60. Optimizations in the femto-based actuator/suspension system enable the 7K100 to endure 300Gs of operating shock, 1,000Gs of non-operating shock and 600,000 load/unload cycles, and contributes to its highly durable and rugged design. Enhanced Adaptive Battery Life Extender™ (ABLE) is Hitachi's third generation unique power management technology that significantly reduces power consumption, resulting in superior battery utilization and enhanced service life of host systems using the drive. This combination of capacity, speed, durability, quiet operation and optimum power efficiency on a proven platform for quality and reliability, enables the 7K100 to deliver desktop-like performance to notebook PCs and other compact, high-end devices.

Advanced mobile systems

Hitachi offers the 7K100 with both the Parallel and Serial ATA (SATA) interfaces. The native SATA implementation in the 7K100 offers a rich set of advanced SATA features, including its high-speed 1.5Gb/s data transfer rate as well as Native Command Queuing (NCQ), Hot Plug, Staggered Spin-up, Link Power Management™ and Asynchronous Notification.

Specifications

Model(s)	HTS721010G9AT00 HTS721080G9AT00 HTS721060G9AT00	HTS721010G9SA00 HTS721080G9SA00 HTS721060G9SA00
Configuration	Parallel ATA	Serial ATA
Interface	ATA-6 SATA	1.5Gb/s w/NCQ
Capacity (GB) ¹	100 / 80 / 60	←
Sector size (Bytes)	512	←
Recording zones	24	←
Data heads (physical)	4 / 4 / 3	←
Data disks	2 / 2 / 2	←
Max. areal density (Gbits/sq. inch)	81 / 66 / 66	←
Performance		
Data buffer (MB) ²	8	←
Rotational speed (RPM)	7200	←
Latency average (ms)	4.2	←
Media transfer rate (Mbits/sec, max)	629 / 561 / 561	←
Interface transfer rate (MB/sec, max)	100 Ultra DMA mode-5 16.6 PIO mode-4	1.5Gb/sec
Seek time (typical)		
Average (ms)	10 R / 11 W	←
Track to track (ms)	1 R / 1.2 W	←
Full stroke (ms)	18 R / 19 W	←
Reliability		
Load/Unload cycle	600,000	←
Power		
Requirement	+5VDC (+-5%)	←
Dissipation (Typical)		
Startup (peak, max.)	5.5W	←
Seek	2.3W	2.7W
Read (avg.)	2.0W	2.3W
Write (avg.)	2.0W	2.3W
Performance idle (avg.)	1.8W	2.0W
Active idle (avg.)	1.1W	1.2W
Low power idle (avg.)	0.85W	0.9W
Standby (avg.)	0.2W	0.25W
Sleep	0.1W	0.2W
Physical Size		
Height (mm)	9.5	←
Width (mm)	70	←
Depth (mm)	100	←
Weight - typical (g)	115	←
Environmental characteristics		
Operating		
Ambient temperature	5° to 55° C	←
Shock (half sine wave)	300G / 2ms, 160G / 1ms	←
Non-operating		
Ambient temperature	-40° to 65° C	←
Shock (half sine wave)	1000G / 1 ms	←
Acoustics (A-Weighted Sound Power (Bels))		
Idle (typ.)	2.6	←
Op (typ.)	3.0	←
RoHS compliant ³	yes	←

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Hitachi quality and service

Hitachi Travelstar hard disk drives are designed to the highest quality standards and contain field-proven components to provide superior data storage backed by Hitachi warranty. Hitachi provides worldwide technical support and services to enable global customers to bring their products to market quickly.

How to Read the Travelstar Model Number

HTS721010G9AT00 = 100GB/8MB

H = Hitachi

T = Travelstar

S = Standard

72 = 7200 RPM

10 = Full capacity - 100GB

10 = Capacity this model 10 = 100GB

(80 = 80GB, 60 = 60GB)

G = Generation code

9 = 9.5mm z - height

AT = ATA interface (SA = Serial ATA interface)

0 = Reserved

0 = Reserved

Information and Technical Support

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Program Support

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¹ GB equals one billion bytes when referring to hard drive capacity; accessible capacity may be less.

² Upper 417KB reserved for firmware; 418KB reserved on SATA models.

³ RoHS refers to the European Union Directive 2002/95/EC on the restriction of certain hazardous substances in electrical and electronic equipment.

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