



# Travelstar® Z5K1

## Highlights

- 1TB<sup>1</sup> of capacity
- Advanced Format, 512 byte emulation
- 6Gb/s SATA interface
- Low power consumption
- Noise-reducing technology for quiet operation
- Industry-standard 7mm thickness, 2.5-inch form factor

## Applications/ Environments

- Notebook and ultra-portable PCs
- External storage



### 1TB of Storage Capacity for Mobile Platforms

The Travelstar® Z5K1 delivers 1TB of capacity for on-the-go computing. Designed to deliver solid performance and reliability for mobile devices, it's got the space to hold an enormous amount of photos, videos and files. Travelstar Z5K1 comes in an industry-standard 2.5-inch form factor with a 6Gb/s SATA interface and leverages Advanced Format technology, which increases the physical sector size on hard drives from 512 bytes to 4096(4K) bytes to increase drive capacities and improve error correction capabilities. Its slim 7mm thickness supports slim, portable designs, and will also fit most 9.5mm bays – an ideal choice for use as primary storage in notebooks and also in external enclosures.



### Innovations to Support Mobile Computing

In a notebook drive, silence is golden. Noise-reducing technologies in the Travelstar Z5K1 make it one of the quietest 2.5-inch hard drives on the market. State-of-the-art seeking algorithms and advanced power management features ensure low power consumption for longer battery life and more “unplugged” time on your portable device. When you need capacity and performance, trust your data to Travelstar hard drives, designed for mobile computing.



1TB | 5400 RPM | 7mm  
SATA 6Gb/s

## Features and Benefits

	Feature / Function	Benefits
Capacity	1TB	Store up to 250,000 songs, 250 hours of SD video, 40 hours of Full HD video, or 30 games*
Form Factor	2.5-inch HDD with slim 7mm thickness	Industry-standard shape enables slim designs and also fits most 9.5mm drive bays and enclosures
Power	<ul style="list-style-type: none"> <li>• 1.5W read/write power</li> <li>• 0.5W low power idle</li> </ul>	Low energy use for longer battery life and more “unplugged” notebook time
Reliability	<ul style="list-style-type: none"> <li>• 400G operating shock</li> <li>• 1000G non-operating shock</li> </ul>	Supports portable designs for mobile computing
Design	<ul style="list-style-type: none"> <li>• 2.5-inch form factor</li> <li>• 7mm z-height</li> </ul>	Enables easy integration into mobile devices and platforms
Acoustics	Quiet operation	Richer audio-listening experience for music, movies and games
Interface	SATA 6Gb/s	Fast data throughput

\* Capacities may not be combined. Number of songs are based on MP3 format for 4 minutes per song, 128 kbps bit rate and 11:1 compression ratio. SD video based on 480i/24 and H.264 compression (~3.6GB/hr). HD video based on 1080p/24 and H.264 compression (~25GB/hr). Games based on 30GB install size. Actual storage may vary depending on compression, bit rates, frame rates, and system software installation.



# Travelstar® Z5K1

## Specifications

Model / Part No.	HTS541010B7E610 / 1W10028
<b>Configuration</b>	
Interface	SATA 6Gb/s
Capacity (GB) <sup>1</sup>	1TB
Sector size (bytes) <sup>2</sup>	512e
Areal density (max, Gbit/sq.in.)	1060
<b>Performance</b>	
Data buffer (MB) <sup>3</sup>	128
Rotational speed (RPM)	5400
Latency average (ms)	5.5
Media transfer rate (max, Mbits/sec)	1040
Interface transfer rate (MB/sec)	600
Seek time	
Average (typical) ms (read) <sup>4</sup>	11
Track to track (typical) ms (read)	1.2
Full stroke (typical) ms (read)	21
<b>Reliability</b>	
Load/Unload cycle	600,000
<b>Power</b>	
Requirement	+5VDC (+/-5%)
Dissipation (typical)	
Startup (W, peak, max)	5.0
Seek, (W, avg.)	1.6
Read/Write, (W, avg.)	1.5
Idle, (W, avg.)	0.5
Standby, (W, avg.)	0.12
Sleep (W)	0.12
<b>Physical size</b>	
Height (mm)	7.0 (+/- 0.2)
Width (mm)	69.97 (+/-0.13)
Length (mm)	100.20 (+/-0.25)
Weight (g, avg.)	92
<b>Environmental (operating)</b>	
Shock	400G (2ms)
Ambient temperature	0° to 60° C
<b>Environmental (non-operating)</b>	
Shock	1000G (1ms)
Ambient temperature	-40° to 65° C
<b>Acoustics (A-weighted sound power)</b>	
Idle (typical, Bels)	1.9
Seek (typical, Bels)	2.1

## 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

HTS541010B7E610 = 1TB SATA 6Gb/s 7mm

H = HGST  
 T = Travelstar  
 S = Standard model  
 54 = 5400 RPM  
 10 = Max capacity (1TB)  
 10 = Capacity this model, 10=1TB  
 B = Generation code  
 7 = 7mm z-height  
 E6 = SATA 6Gb/s with 512 emulation  
 1 = 128MB cache buffer  
 0 = Reserved

<sup>1</sup>One gigabyte (GB) is equal to one billion bytes and one terabyte (TB) is equal to 1,000GB when referring to hard drive capacity.

Accessible capacity will vary depending on the operating environment and formatting.

<sup>2</sup>Advanced Format drive: 4K physical sectors with 512-byte emulation

<sup>3</sup>Portion of buffer used for firmware

<sup>4</sup>Excludes command overhead

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