

Travelstar® Z7K500.B

Highlights

- 500GB¹ of capacity
- 7mm z-height, 2.5-inch form factor
- 7200 RPM performance
- Advanced Format, industry standard 4K sector size
- 512-byte emulation
- 6Gb/s SATA interface

Applications/ Environments

- Notebook and ultra-portable PCs
- Compact desktop PCs
- External storage
- Gaming consoles



High-Performance 500GB for Mobile Applications

Designed with affordable performance in mind, the Travelstar® Z7K500.B delivers the right mix of capacity and speed for thin and light mobile applications. This 7mm 2.5-inch mobile drive is offered with 500GB of capacity points and supports slim mobile system designs, but is also compatible with most standard 9.5mm bays. With an operational speed of 7200 RPM, the Z7K500.B is a perfect mainstream storage choice for mobile devices, external storage and gaming consoles.



Innovations to Support Mobile Storage

In a notebook drive, silence is golden. Noise reducing technologies in the Travelstar Z7K500.B make it one of the quietest mobile 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.



HGST Quality and Service

HGST’s mobile hard drives are designed to high 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.



500GB
7200 RPM | SATA 6Gb/s



Features and Benefits

| | Feature / Function | Benefits |
|-------------|---|---|
| Capacity | 500GB storage | Store up to 125,000 songs, 125 hours of SD video, 20 hours of Full HD, or 15 games* |
| Form Factor | 2.5-inch HDD with slim 7mm thickness | Compact size supports portable designs for mobile computing |
| Reliability | <ul style="list-style-type: none"> • 400G operating shock • 1000G non-operating shock | Helps provide protection against rough handling in a mobile environment |
| Acoustics | Quiet operation | Richer audio-listening experience for music, movies and games |
| Performance | Up to 1304Mb/s media transfer rate | Fast downloads and excellent application performance |
| Interface | SATA 6Gb/s | Fast data throughout |

* 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® Z7K500.B

Specifications

| | |
|---|---------------------------|
| Model / Part No. | HTS725050B7E630 / 1W10098 |
| Configuration | |
| Interface | SATA 6Gb/s |
| Capacity (GB) ¹ | 500 |
| Sector size (bytes) ² | 512e |
| Performance | |
| Data buffer (MB) ³ | 32 |
| Rotational speed (RPM) | 7200 |
| Sustained data transfer rate (MB/s) | 163 |
| Media transfer rate (Mbits/s, max) | 1304 |
| Latency average (ms) | 4.2 |
| Interface transfer rate (MB/s) | 600 |
| Seek time, average (typical) ms (read) | 12 |
| Reliability | |
| Load/Unload cycle | 600,000 |
| Power | |
| Requirement | +5VDC (+-5%) |
| Dissipation (typical) | |
| Startup (W, peak, max) | 5.5 |
| Seek (W, avg.) | 2.1 |
| Read/Write (W, avg.) | 2.0 |
| Low power idle (W, avg.) | 0.85 |
| Standby (W, avg.) | 0.25 |
| Sleep | 0.25 |
| Physical size | |
| Height (mm, max) | 7 |
| Width (mm) | 69.85 (+/- 0.25) |
| Length (mm) | 100.20 (+/- 0.25) |
| Weight (typical, g) | 92 |
| Environmental (operating) | |
| Shock (half-sine wave) | 400G/2ms |
| Ambient temperature | 0° to 60° C |
| Environmental (non-operating) | |
| Shock (half-sine wave) | 1000G/2 ms |
| Ambient temperature | -40° to 65° C |
| Acoustics (A-weighted sound power) | |
| Idle (typical, Bels) | 2.3 |
| Seek (typical, Bels) | 2.5 |

How to read the Travelstar model number

HTS725050A7E630 = 500GB, SATA 6Gb/s

H = HGST
 T = Travelstar
 S = Standard
 72 = 7200 RPM
 50 = Full capacity — 500GB
 50 = Capacity this model, 50 = 500GB
 B = Generation code
 7 = 7mm z-height
 E6 = SATA 6Gb/s with 512 emulation
 3 = 32MB cache
 0 = No encryption

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

⁴ Excludes command overhead