HGST
a Western Digital brand

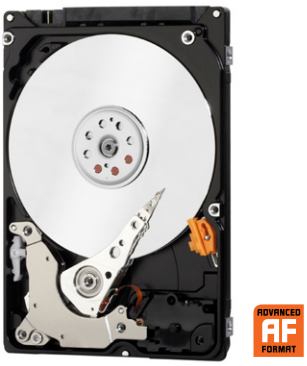
CinemaStar® C5K1000.B

Highlights

- 1TB[1] of capacity for video applications
- Advanced Format, 512-byte emulation
- 3Gb/s SATA interface
- 24x7 availability[5]
- Low power consumption to help reduce energy costs
- Noise-reducing technology for quiet operation
- Industry-standard 9.5mm thickness, 2.5-inch form factor

Applications/ Environments

- Digital Video Recorders (DVRs)
- Set-top Boxes
- DVR-enabled Televisions
- High-end Audio Systems
- Video Surveillance Systems



1TB
5400 RPM | SATA 3Gb/s

1TB of Storage Capacity for Video Platforms

Designed to deliver solid performance and reliability for video systems and applications, CinemaStar® C5K1000.B delivers 1TB of capacity in an industry-standard 2.5-inch form factor. This 9.5mm, two-disk design 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. Consult the HGST Advanced Format Technology Brief for more information on using these hard drives. The 3Gb/s SATA interface supports excellent streaming performance for video and surveillance applications.

Designed for Digital Video Applications

An exceptional blend of audio/visual (AV) features fine tunes the CinemaStar C5K1000.B for video storage applications. Engineered for 24x7 operation in compact DVR, set-top boxes and surveillance systems, the CinemaStar C5K1000.B delivers performance and capacity you can count on for streaming capture and playback.

HGST Quality and Service

HGST CinemaStar 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.

Features and Benefits

	Feature / Function	Benefits
Capacity	1TB of storage	Store up to 250 hours of SD video, 40 hours of Full HD video or 250,000 songs*
Reliability	• 400G operating shock • 1000G non-operating shock	Protection against bumps and rough handling
Design	• 2.5-inch form factor • 9.5mm z-height	Industry-standard dimensions enable easy integration into mobile devices and platforms
Acoustics	Quiet operation	Richer audio-listening experience for music, movies and games
Interface	3Gb/s SATA	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). Actual storage may vary depending on compression, bit rates, frame rates and system software installation.

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Specifications

Models	HCC541010B9E360 / 1W10113
Configuration	
Interface	SATA 3Gb/s
Capacity[1]	1TB
Sector size (bytes)[2]	512e
Performances	
Data buffer (MB)[3]	16
Rotational speed (RPM)	5400
Latency average (ms)	5.5
Media transfer rate (max, Mbits/s)	1152
Interface transfer rate (MB/s)	300
Seek time (ms, average, read)[4]	15
Reliability	
Load/Unload cycles	600,000
Power on Hours (POH per month)	732
Availability (hrs/day x days/wk)[5]	24x7
Power	
Requirement	+5VDC (+-5%)
Dissipation Startup (W, peak, max)	5.0
Read/Write (W, average)	1.5
Physical size	
z-height (mm, avg.)	9.5 (+-2)
Dimensions (width x depth, mm)	70 x 100
Weight (g, avg.)	115
Environmental (operating)	
Shock[6]	400G (2ms)
Base Casting temperature	0° to 65° C
Environmental (non-operating)	
Shock[6]	1000G (2ms)
Base Casting temperature	-40° to 70° C
Acoustics (A-weighted sound power)	
Idle (Bels, typical)	2.4
Operating (Bels, typical)[7]	2.5

How to read the CinemaStar model number

HCC541010B9E360 = 1TB SATA 3Gb/s
H = HGST
C = CinemaStar
C = Compact
54 = 5400 RPM
10 = Max capacity (1TB)
10 = Capacity this model, 10=1TB
B = Generation code
9 = 9.5mm z-height
E3 = SATA 3Gb/s with 512-byte emulation
6 = 16MB cache buffer
0 = Reserved

[1] One 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 from the stated capacity due to formatting and partitioning of the hard drive, the computer's operating system, and other factors.

[2] Advanced Format drive: 4K physical sectors with 512-byte emulation

[3] Portion of buffer used for firmware

[4] Excludes command overhead

[5] Designed for low duty cycle, non mission-critical digital video applications. Note that customer environments vary from application to application.

[6] Half-sine wave, measured without shock isolation and without non-recoverable errors

[7] Assumes random seek at a rate of 26 seeks per second.

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