



BARRACUDA

COMPUTE



2.5 HDD DATA SHEET

Amazing Versatility.
Unmatched Dependability.



Seagate brings over 20 years of trusted performance and reliability to the Seagate® BarraCuda® 2.5-inch HDDs—now available in capacities up to 5TB.



Best-Fit Applications

- Laptops
- Mobile storage
- External storage systems
- All-in-one PCs
- Ultra-slim desktop PCs

Key Advantages

Broadest 2.5-inch hard drive portfolio with up to 5TB capacity and both 7mm and 15mm form factors suitable for a variety of compute applications.

Thinnest and lightest 2.5-inch hard drive with up to 2TB storage in a 7mm z-height, providing seamless upgrades of thin and light laptops and smaller form factor systems.

Fast data rates of up to 140MB/s enables superior PC end-user experience and snappier file transfers.

2.5-inch, 15mm z-height hard drives provide 3TB to 5TB in capacity, offering **the highest-capacity 2.5-inch hard drives** available for external or all-in-one storage.

15mm z-height enables slimmer all-in-one desktop PC drives while helping reduce system heat generation and vibration.

Low startup current configurations for 3TB to 5TB drives enable **use in legacy low-current systems** like USB-2 external boxes, while simultaneously lowering power consumption.

5TB drives can store more than **1.25 million songs and 600 hours of HD video.**¹

¹ Quantitative usage examples for 5TB capacity drive



Specifications	5TB ¹	4TB ¹	3TB ¹	2TB ¹	1TB ¹	500GB ¹
Model Numbers	ST5000LM000	ST4000LM024	ST3000LM024	ST2000LM015	ST1000LM048	ST500LM030
Bytes per Sector (logical/physical)	512/4096	512/4096	512/4096	512/4096	512/4096	512/4096
Performance						
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Data Transfer Rate (MB/s)	Up to 140	Up to 140	Up to 140	Up to 140	Up to 140	Up to 140
Cache (MB)	128	128	128	128	128	128
Spindle Speed (RPM)	5400	5400	5400	5400	5400	5400
Reliability/Data Integrity						
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000	600,000
Head-Rest Method	QuietStep™ Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load	QuietStep Ramp Load
Nonrecoverable Read Errors per Bits Read, Max Limited Warranty ²	1 per 10E14 2	1 per 10E14 2	1 per 10E14 2	1 per 10E14 2	1 per 10E14 2	1 per 10E14 2
Power Management						
Startup Current (+5V, A)	1.2	1.2	1.2	1.0	1.0	1.0
Read/Write Power, Average (W)	1.9/2.1	1.9/2.1	1.9/2.1	1.7/1.8	1.6/1.7	1.6/1.7
Idle Power, Average (W)	1.1	1.1	1.1	0.5	0.45	0.45
Environmental						
Temperature, Operating (°C)	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
Temperature, Nonoperating (°C)	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Shock, Operating: 2ms (Gs)	300	300	300	400	400	400
Shock, Nonoperating: 1ms (Gs)	650	650	650	1000	1000	1000
Acoustics, Idle, Typical (bels—sound power)	2.6	2.6	2.6	2.2	2.0	2.0
Acoustics, Seek, Typical (bels—sound power)	2.7	2.7	2.7	2.4	2.2	2.2
Physical						
Height (mm/in)	15/0.59	15/0.59	15/0.59	7.0/0.276	7.0/0.276	7.0/0.276
Width (mm/in)	69.85/2.750	69.85/2.750	69.85/2.750	69.85/2.750	69.85/2.750	69.85/2.750
Depth (mm/in)	100.35/3.951	100.35/3.951	100.35/3.951	100.35/3.951	100.35/3.951	100.35/3.951
Weight (lb, max)	190/0.42	190/0.42	190/0.42	90/0.198	90/0.198	90/0.198
Carton Unit Quantity	40	40	40	50	50	50
Cartons Per Pallet/Layer	60/10	60/10	60/10	60/10	60/10	60/10
Special Features						
Multi-Tier Caching Technology™	Yes	Yes	Yes	Yes	Yes	Yes
Halogen Free	Yes	Yes	Yes	Yes	Yes	Yes
RoHS Compliance	Yes	Yes	Yes	Yes	Yes	Yes

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

² Extended warranty products available. Consult your distributor for details.

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