

TOSHIBA



X300 Performance Hard Drives

Level up your drive performance

Toshiba X300 Performance Hard Drive is designed for your professional or gaming PC. Delivering reliable, large capacity, incredibly high-performance storage. This is made possible by a number of advanced features, including an up to 512 MiB buffer. It even features improved positional accuracy for stable recording. The X300 is ideal for PC gamers, graphic designers, and other users with demanding storage requirement.



Use for

- Powerful Desktop Workstations
- All-in-one PCs
- Gaming computers
- Home Media computers

Top Features

- MTTF/MTBF 0.6 million hours
- 7200 rpm speed with up to 512 MiB buffer
- CMR technology
- 3.5-inch Form Factor

Capacities

22 TB	20 TB	18 TB	16 TB	14 TB
12 TB	10 TB	8 TB	6 TB	4 TB



X300

 Performance Hard Drives

Capacity *1	22 TB	20 TB	18 TB	16 TB	End of Sales		End of Sales		End of Sales			
					16 TB	14 TB	14 TB	12 TB	12 TB			
Parts Number	HDWR62CUZSVA	HDWR62AUZSVA	HDWR51JUZSVA	HDWR51GUZSVA	HDWR31GUZSVA	HDWR51EUZSVA	HDWR21EUZSVA	HDWR51CUZSVA	HDWR21CUZSVA			
Part Number (Retail Package) *2	HDWR62C*ZSTA	HDWR62A*ZSTA	HDWR51J*ZSTA	HDWR51G*ZSTA	HDWR31G*ZSTA	HDWR51E*ZSTA	HDWR21E*ZSTA	HDWR51C*ZSTA	HDWR21C*ZSTA			
Basic Specifications												
Recording Technology	CMR											
Interface	SATA 6.0 Gbit/s											
Mechanical Design	He											
Form Factor *3	3.5-inch											
Sector Size	512e											
Shock Sensor	yes											
Performances												
Rotation Speed	7200 rpm											
Buffer Size *4	512 MiB			256 MiB			512 MiB		256 MiB			
Reliability												
MTTF / MTBF *5	600 000 hours											
Unrecoverable Error Rate	1 per 10E15			1 per 10E14								
Load/Unload cycles	300 000 times											
Power Requirements												
Supply Voltage	12 VDC ±10 % 5 VDC +10 / -7 %					12 VDC ±10 % 5 VDC ±5 %		12 VDC ±10 % 5 VDC +10 / -7 %		12 VDC ±10 % 5 VDC ±5 %		
Power Consumption	Operating	8.02 W		7.48 W		6.91 W		7.38 W		6.77 W		
	Active Idle	4.35 W		4.41 W		4.14 W		4.03 W		3.77 W		
Environmental												
Temperature	Operating	5 to 60 °C (Surface)										
	Non-operating	-40 to 70 °C										
Vibration	Operating	7.35 m/s ² {0.75 G} (5 to 300 Hz) 2.45 m/s ² {0.25 G} (300 to 500 Hz)										
	Non-operating	29.4 m/s ² {3.0 G} (5 to 500 Hz)										
Shock	Operating	490 m/s ² {50 G} (2 ms duration)			686 m/s ² {70 G} (2 ms duration)							
	Non-operating	1960 m/s ² {200 G} (2 ms duration)			2450 m/s ² {250 G} (2 ms duration)							
Acoustics (Active Idle)	20 dB (Typ.)											
Physical												
Dimensions	147 (L) x 101.85 (W) x 26.1 (H) mm (Max)											
Weight	720 g (Max)				705 g (Max)		720 g (Max)		690 g (Max)		720 g (Max)	

*1 Definition of capacity: One terabyte (TB) = one trillion bytes, but storage capacity actually available may vary depending on operating environment and formatting. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system and/or pre-installed software applications, or media content. Actual formatted capacity may vary.

2 The asterisk mark() in the parts number indicates that the alphabet varies depending on region.

*3 "3.5-inch" means the form factor of HDDs. They do not indicate drive's physical size.

*4 A mebibyte (MiB) means 1 048 576 bytes.

*5 MTTF/MTBF (Mean Time to Failure/Mean Time Between Failures) is not a guarantee or estimate of product life; it is a statistical value related to mean failure rates for a large number of products which may not accurately reflect actual operation. Actual operating life of the product may be different from the MTTF/MTBF.

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X300

 Performance Hard Drives

End of Sales

Capacity *1	10 TB	8 TB	8 TB	6 TB	6 TB	4 TB	4 TB	4 TB
Parts Number	MD10ADA10TS HDWR71AUZSVA	MD10ADA800S HDWR780UZSVA	HDWR480UZSVA	MD10ADA600S HDWR760UZSVA	HDWR460UZSVA	MD10ADA400ES HDWR740UZSVA	HDWR440UZSVA	HDWE140UZSVA
Part Number (Retail Package) *2	HDWR71A*ZSTA	HDWR780*ZSTA	HDWR480*ZSTA	HDWR760*ZSTA	HDWR460*ZSTA	HDWR740*ZSTA	HDWR440*ZSTA	HDWE140*ZSTA

Basic Specifications

Recording Technology	CMR
Interface	SATA 6.0 Gbit/s
Mechanical Design	Air
Form Factor *3	3.5-inch
Sector Size	512e
Shock Sensor	yes

Performances

Rotation Speed	7200 rpm						
Buffer Size *4	512 MiB	256 MiB	512 MiB	256 MiB	512 MiB	256 MiB	128 MiB

Reliability

MTTF / MTBF *5	600 000 hours							
Unrecoverable Error Rate	1 per 10E15	1 per 10E14	1 per 10E15	1 per 10E14	1 per 10E15	1 per 10E14	1 per 10E15	1 per 10E15
Load/Unload cycles	600 000 times	300 000 times	600 000 times	300 000 times	600 000 times	300 000 times	300 000 times	300 000 times

Power Requirements

Supply Voltage	12 VDC ±10 % 5 VDC +10 / -7 %	12 VDC ±10 % 5 VDC ±5 %	12 VDC ±10 % 5 VDC +10 / -7 %	12 VDC ±10 % 5 VDC ±5 %	12 VDC ±10 % 5 VDC +10 / -7 %	12 VDC ±10 % 5 VDC ±5 %	12 VDC ±10 % 5 VDC ±5 %	12 VDC ±5 % 5 VDC ±5 %	
Power Consumption	Operating	9.07 W	8.19 W	8.41 W	7.43 W	7.72 W	6.75 W	6.81 W	11.3 W
	Active Idle	5.74 W	4.92 W	5.61 W	4.14 W	4.93 W	3.49 W	4 W	7.5 W

Environmental

Temperature	Operating	5 to 60 °C (Surface)							
	Non-operating	-40 to 70 °C							
Vibration	Operating	7.35 m/s ² {0.75 G} (5 to 300 Hz) 2.45 m/s ² {0.25 G} (300 to 500 Hz)	7.35 m/s ² {0.75 G} (2 to 300 Hz) 4.90 m/s ² {0.50 G} (300 to 350 Hz) 2.45 m/s ² {0.25 G} (350 to 500 Hz)	7.35 m/s ² {0.75 G} (5 to 300 Hz) 2.45 m/s ² {0.25 G} (300 to 500 Hz)	7.35 m/s ² {0.75 G} (2 to 300 Hz) 4.90 m/s ² {0.50 G} (300 to 350 Hz) 2.45 m/s ² {0.25 G} (350 to 500 Hz)	7.35 m/s ² {0.75 G} (5 to 300 Hz) 2.45 m/s ² {0.25 G} (300 to 500 Hz)	7.35 m/s ² {0.75 G} (2 to 300 Hz) 4.90 m/s ² {0.50 G} (300 to 350 Hz) 2.45 m/s ² {0.25 G} (350 to 500 Hz)	7.35 m/s ² {0.75 G} (5 to 300 Hz) 2.45 m/s ² {0.25 G} (300 to 500 Hz)	7.35 m/s ² {0.75 G} (5 to 300 Hz) 2.45 m/s ² {0.25 G} (300 to 500 Hz)
	Non-operating	29.4 m/s ² {3.0 G} (5 to 500 Hz)							
Shock	Operating	686 m/s ² {70 G} (2 ms duration)	784 {80 G} (2 ms duration)	686 m/s ² {70 G} (2 ms duration)	784 {80 G} (2 ms duration)	686 m/s ² {70 G} (2 ms duration)	784 {80 G} (2 ms duration)	686 m/s ² {70 G} (2 ms duration)	686 m/s ² {70 G} (2 ms duration)
	Non-operating	2450 m/s ² {250 G} (2 ms duration)							2940 m/s ² {300 G} (2 ms duration)
Acoustics (Active Idle)	34 dB (Typ.)		31 dB (Typ.)	34 dB (Typ.)	31 dB (Typ.)	34 dB (Typ.)	31 dB (Typ.)		

Physical

Dimensions	147 (L) x 101.85 (W) x 26.1 (H) mm (Max)							
Weight	755 g (Max)	730 g (Max)	720 g (Max)	710 g (Max)	700 g (Max)	690 g (Max)	693 g (Max)	720 g (Max)

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