TOSHIBA

X300
Performance Hard Drives

Level up your drive performance

Toshiba X300 Performace 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.

50+ YEARS OF TOSHIBA STORAGE INNOVATION

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

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Write your story.

X300

Performance Hard Drives

Capacity *1		22 TB	20 TB	18 TB	16 TB	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	6.85 W	6.77 W
	Active Idle	4.35 W	4.41 W	4.14 W		4.03 W	3.77 W	4.54 W	3.3 W	4.54 W
Environmental										
Temperature	Operating	5 to 60 °C (Surface)								
	Non-operating	-40 to 70 °C								
Vibration	Operating	7.35 m/s² {0.75 G} (5 to 300 Hz) 2.45 m/s² {0.25 G} (300 to 500 Hz)								
	Non-operating	29.4 m/s² {3.0 G} (5 to 500 Hz)								
Shock	Operating	490 m/s² {50 G} (2 ms duration)		686 m/s² {70 G} (2 ms duration)						
	Non-operating	1960 m/s² {200 G} (2 ms duration)		2450 m/s² {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.

- Product image may represent a design model.
- Before creating and producing designs and using, customers must also refer to and comply with the latest versions of all relevant information of this document and the instructions for the application that Product will be used with or for.

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Performance Hard Drives

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
Load/Unload cycles		600 000 times		300 000 times	600 000 times	300 000 times	600 000 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 ±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)
	Non-operating	29.4 m/s^2 {3.0 G} (5 to 500 Hz)							49.0 m/s^2 {5.0 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)
	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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