

# 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 16 TB	14 TB	End of Sales 14 TB	12 TB	End of Sales 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) Non-operating: 1960 m/s² {200 G} (2 ms duration) 686 m/s² {70 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.
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X300



								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	
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	11.3 W
	Active Idle	5.74 W	4.92 W	5.61 W	4.14 W	4.93 W	3.49 W	7.5 W

Environmental								
Temperature	Operating	5 to 60 °C (Surface)						
	Non-operating	-40 to 70 °C						
Vibration	Operating	7.35 m/s <sup>2</sup> {0.75 G} (5 to 300 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (300 to 500 Hz)	7.35 m/s <sup>2</sup> {0.75 G} (2 to 300 Hz) 4.90 m/s <sup>2</sup> {0.50 G} (300 to 350 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (350 to 500 Hz)	7.35 m/s <sup>2</sup> {0.75 G} (5 to 300 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (300 to 500 Hz)	7.35 m/s <sup>2</sup> {0.75 G} (2 to 300 Hz) 4.90 m/s <sup>2</sup> {0.50 G} (300 to 350 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (350 to 500 Hz)	7.35 m/s <sup>2</sup> {0.75 G} (5 to 300 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (300 to 500 Hz)	7.35 m/s <sup>2</sup> {0.75 G} (2 to 300 Hz) 4.90 m/s <sup>2</sup> {0.50 G} (300 to 350 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (350 to 500 Hz)	7.35 m/s <sup>2</sup> {0.75 G} (5 to 300 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (300 to 500 Hz)
	Non-operating	29.4 m/s <sup>2</sup> {3.0 G} (5 to 500 Hz)						49.0 m/s <sup>2</sup> {5.0 G} (5 to 500 Hz)
Shock	Operating	686 m/s <sup>2</sup> {70 G} (2 ms duration)	784 {80 G} (2 ms duration)	686 m/s <sup>2</sup> {70 G} (2 ms duration)	784 {80 G} (2 ms duration)	686 m/s <sup>2</sup> {70 G} (2 ms duration)	784 {80 G} (2 ms duration)	686 m/s <sup>2</sup> {70 G} (2 ms duration)
	Non-operating	2450 m/s <sup>2</sup> {250 G} (2 ms duration)					2940 m/s <sup>2</sup> {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)	720 g (Max)

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