X300 Pro Performance Hard Drives

Capacity to Create. Built to Perform

Toshiba X300 Pro Performace Hard Drive, built for high-end workstations and multimedia systems, can support high intensity workloads up to 300 TB/year with increased reliability of up to MTTF/MTBF 1.0 million hours and room up to 22 TB of storage capacity.
Optimized to handle high-end graphics and videos, the X300 Pro delivers a fast 7200 rpm rotational speed and large cache size to help shorten response time.

50+ YEARS OF TOSHIBA STORAGE INNOVATION

Use for

- Professional desktop workstations
- Multimedia design workstations
- High-end gaming computers
- High workload performance PC

Top Features

- Workload up to 300 TB/year
- MTTF/MTBF 1.0 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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X300 Pro

Performance Hard Drives

Capacity *1		22 TB	20 TB	18 TB	16 TB	14 TB	12 TB
Parts Number		HDWR62CUZSVB	HDWR62AUZSVB	HDWR51JUZSVB	HDWR51GUZSVB	HDWR51EUZSVB	HDWR51CUZSVB
Part Number (Retail Package) *2		HDWR62C*ZSTB	HDWR62A*ZSTB	HDWR51J*ZSTB	HDWR51G*ZSTB	HDWR51E*ZSTB	HDWR51C*ZSTB
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					
Reliability							
MTTF / MTBF *5		1 000 000 hours					
Unrecoverable Error Rate		1 per 10E15		1 per 10E14			
Maximum rated workload *6		300 TB/year					
Load/Unload cycles		300 000 times					
Power Requirements							
Supply Voltage		12 VDC ±10 % 5 VDC +10 / -7 %					
Power Consumption	Operating	8.02 W		7.48 W		7.38 W	6.85 W
	Active Idle	4.35 W	4.41 W	4.14 W		3.77 W	3.3 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)	690 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.
*6 Workload is a measure of the data throughput of the year, and it is defined as the amount of data written, read or verified by commands from the host system.

- 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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X300 Pro

Performance Hard Drives

Capacity *1		10 TB	8 TB	8 TB	6 TB	6 TB	4 TB	4 TB
Parts Number		MD10ADA10T HDWR71AUZSVB	MD10ADA800 HDWR780UZSVB	HDWR480UZSVB	MD10ADA600 HDWR760UZSVB	HDWR460UZSVB	MD10ADA400E HDWR740UZSVB	HDWR440UZSVB
Part Number (Retail Package) *2		HDWR71A*ZSTB	HDWR780*ZSTB	HDWR480*ZSTB	HDWR760*ZSTB	HDWR460*ZSTB	HDWR740*ZSTB	HDWR440*ZSTB
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
Reliability								
MTTF / MTBF *5		1 000 000 hours						
Unrecoverable Error Rate		1 per 10E15		1 per 10E14	1 per 10E15	1 per 10E14	1 per 10E15	1 per 10E14
Maximum rated workload *6		300 TB/year		-	300 TB/year	-	300 TB/year	-
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 %						
Power Consumption	Operating	9.07 W	8.19 W	8.7 W	7.43 W	7.97 W	6.75 W	7.17 W
	Active Idle	5.74 W	4.92 W	5.62 W	4.14 W	4.89 W	3.49 W	4.07 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	686 m/s² {70 G} (2 ms duration)						
	Non-operating	2450 m/s² {250 G} (2 ms duration)						2940 m/s² {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)

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