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Level Up Your Drive Performance.

Toshiba X300 Performance Internal Hard Drive

Image does not represent actual product.

Push your gaming and creative limits with the speed, reliability, and capacity of the Toshiba X300 Performance Internal Hard Drive. Optimized to handle high-end graphics and videos, the X300 is powered by a fast 7200 RPM drive with large cache size to minimize buffering time. Toshiba cache technology is designed to help eliminate lag for an ultra-responsive gaming experience. Plus, the X300 offers massive capacity to grow with your gaming and HD content. The X300 Performance Hard Drive works hard so you can play harder.

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Toshiba X300 Performance Internal Hard Drive

Product image may represent a design model.

Application

Powerful desktop workstations / All-in-one PCs/ Gaming computers / Home media computers

Powerful
Designed for gaming & high end desktop PCs

Responsive
Toshiba's cache technology delivers real-time drive performance

Massive Capacity
Store your growing gaming libraries & HD content

High Performance
7200 RPM with large cache size

Accurate
Drive stabilization technology helps optimize read/write performance

Reliable
Ramp loading technology & built-in shock sensors to help protect your content

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Toshiba X300 Performance Internal Hard Drive

Capacity[1]	14TB	12TB	10TB	8TB
Model Number (Retail Packaging)	HDWR21EXZSTA	HDWR21CXZSTA	HDWR11AXZSTA	HDWF180XZSTA
Model Number (Bulk)	HDWR21EUZSVA	HDWR21CUZSVA	HDWR11AUZSVA	HDWF180UZSVA
Basic Specifications				
Interface	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s
Form Factor[2]	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Advanced Format (AF)	Yes	Yes	Yes	Yes
RoHS Compatible[3]	Yes	Yes	Yes	Yes
Features				
Shock Sensor	Yes	Yes	Yes	Yes
Drive Stabilization Technology	Yes	Yes	Yes	Yes
Toshiba Cache Technology	Yes	Yes	Yes	Yes
Ramp Loading Technology	Yes	Yes	Yes	Yes
Performance				
Rotational Speed [RPM]	7,200	7,200	7,200	7,200
Cache Size [MB]	256	256	256	128
Reliability				
MTTF [Hours][4]	600,000	600,000	600,000	600,000
Unrecoverable Error Rate	1 per 10^{14}	1 per 10^{14}	1 per 10^{14}	1 per 10^{14}
Load/Unload Cycles	300,000	300,000	300,000	300,000
Limited Warranty[5] [Years]	2	2	2	2
Power Management				
Supply Voltage	5 V DC ±5 % 12 V DC ±10 %	5 V DC ±5 % 12 V DC ±10 %	5 V DC +10 / -5 % 12 V DC ±10 %	5 V DC +6 / -5 % 12 V DC ±10 %
Power Consumption (Operating) [W]	6.77	6.77	9.92	9.2
Power Consumption (Idle) [W]	4.54	4.54	7.22	6.2
Enviornmental				
Temperature (Operating) [˚C]	5 to 60 (surface)	5 to 60 (surface)	5 to 60 (surface)	0 to 60 (surface)
Temperature (Non-Operating) [˚C]	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Vibration (Operating)	7.35 m/s² {0.75G} (5 to 300Hz) 2.45 m/s² {0.25G} (300 to 500Hz)	7.35 m/s² {0.75G} (5 to 300Hz) 2.45 m/s² {0.25G} (300 to 500Hz)	7.35 m/s² {0.75G} (5 to 300Hz) 2.45 m/s² {0.25G} (300 to 500Hz)	7.35 m/s² {0.75G} (5 to 300Hz) 2.45 m/s² {0.25G} (300 to 500Hz)
Vibration (Non-Operating)	29.4 m/s² {3.0G} (5 to 500Hz)	29.4 m/s² {3.0G} (5 to 500Hz)	29.4 m/s² {3.0G} (5 to 500Hz)	49.0 m/s² {5.0G} (5 to 500Hz)
Shock (Operating)	686 m/s² {70G} (2 ms duration)	686 m/s² {70G} (2 ms duration)	686 m/s² {70G} (2 ms duration)	686 m/s² {70G} (2 ms duration)
Shock (Non-operating)	2,450 m/s² {250G} (2 ms duration)	2,450 m/s² {250G} (2 ms duration)	2,450 m/s² {250G} (2 ms duration)	2,450 m/s² {250G} (2 ms duration)
Acoustics (Idle Model) [dB]	20	20	34	33
Physical				
Height [mm Max.]	26.1	26.1	26.1	26.1
Length [mm Max.]	147	147	147	147
Width [mm Max.]	101.85	101.85	101.85	101.85
Weight [g Max.]	720	720	770	770
Bottom Holes Type[6]	TYPE1	TYPE1	TYPE1	TYPE1

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Toshiba X300 Performance Internal Hard Drive

Capacity[1]	6TB	5TB	4TB
Model Number (Retail Packaging)	HDWE160XZSTA	HDWE150XZSTA	HDWE140XZSTA
Model Number (Bulk)	HDWE160UZSVA	HDWE150UZSVA	HDWE140UZSVA
		Basic Specifications	
Interface	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s	SATA 6.0 Gbit/s
Form Factor[2]	3.5-inch	3.5-inch	3.5-inch
Advanced Format (AF)	Yes	Yes	Yes
RoHS Compatible[3]	Yes	Yes	Yes
		Features	
Shock Sensor	Yes	Yes	Yes
Drive Stabilization Technology	Yes	Yes	Yes
Toshiba Cache Technology	Yes	Yes	Yes
Ramp Loading Technology	Yes	Yes	Yes
		Performance	
Rotational Speed [RPM]	7,200	7,200	7,200
Cache Size [MB]	128	128	128
		Reliability	
MTTF [Hours][4]	600,000	600,000	600,000
Unrecoverable Error Rate	1 per 10^{14}	1 per 10^{14}	1 per 10^{14}
Load/Unload Cycles	300,000	300,000	300,000
Limited Warranty[5] [Years]	2	2	2
		Power Management	
Supply Voltage	5 V DC ±5 % 12 V DC ±5 %	5 V DC ±5 % 12 V DC ±5 %	5 V DC ±5 % 12 V DC ±5 %
Power Consumption (Operating) [W]	11.3	11.3	11.3
Power Consumption (Idle) [W]	7.5	7.5	7.5
		Enviornmental	
Temperature (Operating) [˚C]	5 to 60 (surface)	5 to 60 (surface)	5 to 60 (surface)
Temperature (Non-Operating) [˚C]	-40 to 70	-40 to 70	-40 to 70
Vibration (Operating)	7.35 m/s² {0.75G} (5 to 300Hz) 2.45 m/s² {0.25G} (300 to 500Hz)	7.35 m/s² {0.75G} (5 to 300Hz) 2.45 m/s² {0.25G} (300 to 500Hz)	7.35 m/s² {0.75G} (5 to 300Hz) 2.45 m/s² {0.25G} (300 to 500Hz)
Vibration (Non-Operating)	49.0 m/s² {5.0G} (5 to 500Hz)	49.0 m/s² {5.0G} (5 to 500Hz)	49.0 m/s² {5.0G} (5 to 500Hz)
Shock (Operating)	686 m/s² {70G} (2 ms duration)	686 m/s² {70G} (2 ms duration)	686 m/s² {70G} (2 ms duration)
Shock (Non-operating)	2,940 m/s² {300G} (2 ms duration)	2,940 m/s² {300G} (2 ms duration)	2,940 m/s² {300G} (2 ms duration)
Acoustics (Idle Model) [dB]	34	31	31
		Physical	
Height [mm Max.]	26.1	26.1	26.1
Length [mm Max.]	147	147	147
Width [mm Max.]	101.85	101.85	101.85
Weight [g Max.]	770	720	720
Bottom Holes Type[6]	TYPE1	TYPE2	TYPE2

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[1] One Gigabyte (1GB) means 10^9 = 1,000,000,000 bytes and One Terabyte (1TB) means 10^{12} = 1,000,000,000,000 bytes using powers of 10. A computer operating system, however, reports storage capacity using powers of 2 for the definition of 1GB= 2^{30} = 1,073,741,824 bytes and 1TB = 2^{40} = 1,099,511,627,776 bytes, and therefore shows less storage capacity. Available storage capacity (including examples of various media files) will vary based on file size, formatting, settings, software and operating system and other factors.
[2] 2.5-inch and 3.5-inch mean the form factor of HDDs. They do not indicate drive's physical size.
[3] Toshiba Storage & Electronic Devices Solutions Company defines "RoHS-Compatible" products as products that either (i) contain no more than a maximum concentration value of 0.1% by weight in Homogeneous Materials for lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) and of 0.01% by weight in Homogeneous Materials for cadmium; or (ii) fall within any of the application exemptions set forth in the Annex to the RoHS Directive (Directive 2011/65/EC of the European Parliament and of the Council of 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment). "Homogeneous Material" means a material of uniform composition that cannot be mechanically disjointed (meaning separated, in principle, by mechanical actions such as unscrewing, cutting, crushing, grinding and/or abrasive processes) into different materials. Examples of "Homogeneous Materials" would be individual types of plastics, ceramics, glass, metals, alloys, paper, board, resins and coatings.
[4] MTTF (Mean Time to Failure) 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 eration. Actual operating life of the product may be different from the MTTF.
[5] Standard limited warranty applies. The warranty brochure can be viewed online at http://storage.toshiba.com/consumer-hdd/warranty-info.
[6] Location of bottom mounting hole is different from product. For more information, please see the following page. https://toshiba.semicon-storage.com/us/design-support/faq/storage-holes.html

Product prices, specifications, configurations, colors, components, features, and availability are subject to change without notice.
Compatibility may vary depending on user's hardware configuration and operating system.