



N300 NAS Hard Drives

Built for 24/7 reliability

Toshiba N300 NAS Hard Drive offers unprecedented reliability for NAS and other high-performance storage systems. It is optimized to meet the reliability, endurance, performance and scalability requirements of 24-hour/7-day high-capacity storage. Suitable for personal, home office and small business use. The N300 is available in capacities of up to 24 TB.



Use for

- NAS and Multimedia Server
- Desktop RAID and Server
- Private Cloud Storage
- Small Business Server and Storage

Top Features

- Designed for 24/7 operation
- Up to 12 drive bays
- Workload up to 180 TB/year
- MTTF/MTBF up to 1.2 million hours
- 7200 rpm speed with up to 1 GiB buffer
- CMR technology
- 3.5-inch Form Factor

Capacities

24	22	20	18	16	14
TB	TB	TB	TB	TB	TE

8 **TB** 4 TB

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NAS Hard Drives

Capacity *1		24 TB	22 TB	20 TB	18 TB	16 TB	14 TB	12 TB	
Parts Number		MN11ACA24TS HDWG82EUZSVA	HDWG62CUZSVA	HDWG62AUZSVA	HDWG51JUZSVA	HDWG51GUZSVA	HDWG51EUZSVA	HDWG51CUZSVA	
Part Number (Retail P	ackage) *2	-	HDWG62C*ZSTA	HDWG62A*ZSTA	HDWG51J*ZSTA	HDWG51G*ZSTA	HDWG51E*ZSTA	HDWG51C*ZSTA	
Basic Specifications									
Recording Technology	/				CMR				
nterface					SATA 6.0 Gbit/s				
Mechanical Design					He				
Form Factor *3					3.5-inch				
Sector Size					512e				
Features									
Orive Bays Supported		up to 12			up	to 8			
4/7 Operation					yes				
Rotational Vibration S	ensor				yes				
Shock Sensor					yes				
Performances									
Rotation Speed		7200 rpm							
Sustained data transfe	er rate *4	309 MB/s (295 MiB/s) (268 MiB/s)							
Buffer Size *5		1 GiB			512	MiB			
Reliability									
MTTF / MTBF *6		1 200 000 hours							
Jnrecoverable Error F	late		1 per 10E15			1 per	10E14		
Maximum rated work	oad *7	180 TB/year							
oad/Unload cycles		600 000 times 300 000 times							
Power Requirements									
Supply Voltage 12 VDC ±10 % 5 VDC +10 /-7 %									
Power Consumption	Operating	7.62 W	8.0	2 W	7.4	8 W	7.38 W	6.85 W	
ower consumption	Active Idle	4.3	5 W	4.41 W	4.1	4 W	3.77 W	3.3 W	
Temperature	Operating	5 to 60 °C (Surface)							
remperature	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/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)							
OHOUR	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									
Dimension		147 (L) x 101.85 (W) x 26.1 (H) mm (Max)							
Weight		730 g (Max)		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 Read and write speed may vary depending on the host device, read and write conditions, and file size.

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

A 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.
 *7 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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your story.



NAS Hard Drives

Capacity *1		10 TB	8 TB	8 TB	6 TB	6 TB	4 TB	4TB
Parts Number		MN10ADA10TS HDWG71AUZSVA	MN10ADA800S HDWG780UZSVA	HDWG480UZSVA	MN10ADA600S HDWG760UZSVA	HDWG460UZSVA	MN10ADA400ES HDWG740UZSVC	HDWG440UZSVA
Part Number (Retail Package) *2		HDWG71A*ZSTA	HDWG780*ZSTA	HDWG480*ZSTA	HDWG760*ZSTA	HDWG460*ZSTA	HDWG740*ZSTC	HDWG440*ZSTA
Basic Specifications								
Recording Technolog	у				CMR			
Interface		SATA 6.0 Gbit/s						
Mechanical Design				Air				
Form Factor *3					3.5-inch			
Sector Size				51	2e			512n
Features								
Drive Bays Supported					up to 8			
24 / 7 Operation					yes			
Rotational Vibration S	Sensor				yes			
Shock Sensor					yes			
Performances								
Rotation Speed					7200 rpm			
Sustained data transfer rate *4			MB/s MiB/s)	260 MB/s (248 MiB/s)	281 MB/s (268 MiB/s)	250 MB/s (239 MiB/s)	281 MB/s (268 MiB/s)	232 MB/s (222 MiB/s)
Buffer Size *5		512	MiB	256 MiB	512 MiB	256 MiB	512 MiB	256 MiB
Reliability					•			
MTTF/MTBF*6		1 000 000 hours						
Unrecoverable Error F	Rate	1 per 10E15						
Maximum rated work	load *7	180 TB/year						
Load/Unload cycles		600 00	0 times	300 000 times	600 000 times	300 000 times	600 000 times	300 000 times
Power Requirements	i							
Supply Voltage			C±10 % 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 %
	Operating	9.07 W	8.19 W	8.41 W	7.43 W	7.72 W	6.75 W	6.84 W
Power Consumption	Active Idle	5.74 W	4.92 W	5.61 W	4.14 W	4.93 W	3.49 W	4.04 W
Environmental								
Temperature	Operating	5 to 60 °C (Surface)		5 to 65 °C (Surface)	5 to 60 °C (Surface)	5 to 65 °C (Surface)	5 to 60 °C (Surface)	5 to 65 °C (Surface)
remperature	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)		7.35 m/s² {0.75 G} (2 to 300 Hz) 4.90 m/s² {0.50 G} (300 to 350 Hz) 2.45 m/s² {0.25 G} (350 to 500 Hz)	7.35 m/s² {0.75 G} (5 to 300 Hz) 2.45 m/s² {0.25 G} (300 to 500 Hz)	7.35 m/s² {0.75 G} (2 to 300 Hz) 4.90 m/s² {0.50 G} (300 to 350 Hz) 2.45 m/s² {0.25 G} (350 to 500 Hz)	7.35 m/s² {0.75 G} (5 to 300 Hz) 2.45 m/s² {0.25 G} (300 to 500 Hz)	7.35 m/s² {0.75 G} (2 to 300 Hz) 4.90 m/s² {0.50 G} (300 to 350 Hz) 2.45 m/s² {0.25 G} (350 to 500 Hz)
	Non-operating			2	9.4 m/s² {3.0 G} (5 to 500 H	z)		
	Operating	686 m/s ² {70 G} (2 ms duration)						
Shock Non-operating		2450 m/s² {250 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								
Dimension		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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