

TOSHIBA



N300 Pro NAS Hard Drives

Trusted Reliability. Built for Business NAS.

Toshiba N300 Pro NAS Hard Drive is ready to help you scale your business with up to 24 drive bay support. Offering a higher workload of up to 300 TB/year and a capacity of up to 22 TB. You can rely on the N300 Pro to help you take your business to the next level. Delivering the 7200 rpm speed you need to access your data quickly and 24/7 operation to help keep your data readily accessible, these drives are optimized to help keep your business growing.



Use for

- Network Attached Storage for high-intensity workloads
- NAS systems for medium or large-sized businesses
- RAID-optimized NAS systems with up to 24 bays

Top Features

- Designed for 24/7 operation
- Up to 24 drive bays
- Workload up to 300 TB/year
- MTTF/MTBF 1.2 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

<https://toshiba.semicon-storage.com/>

NAS Hard Drives



N300 Pro

NAS Hard Drives

Capacity *1	22 TB	20 TB	18 TB	16 TB	14 TB	12 TB
Parts Number	HDWG62CUZSVB	HDWG62AUZSVB	HDWG51JUZSVB	HDWG51GUZSVB	HDWG51EUZSVB	HDWG51CUZSVB
Basic Specifications						
Recording Technology	CMR					
Interface	SATA 6.0 Gbit/s					
Mechanical Design	He					
Form Factor *2	3.5-inch					
Sector Size	512e					
Features						
Drive Bays Supported	up to 24					
24 / 7 Operation	yes					
Rotational Vibration Sensor	yes					
Shock Sensor	yes					
Performances						
Rotation Speed	7200 rpm					
Sustained data transfer rate *3	281 MB/s (268 MiB/s)					
Buffer Size *4	512 MiB					
Reliability						
MTTF / MTBF *5	1 200 000 hours					
Unrecoverable Error Rate	1 per 10E15			1 per 10E14		
Maximum rated workload *6	300 TB/year					
Load/Unload cycles	600 000 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/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)				
Shock	Operating	490 m/s ² {50 G} (2 ms duration)		686 m/s ² {70 G} (2 ms duration)		
	Non-operating	1960 m/s ² {200 G} (2 ms duration)		2450 m/s ² {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	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 "3.5-inch" means the form factor of HDDs. They do not indicate drive's physical size.

*3 Read and write speed may vary depending on the host device, read and write conditions, and file 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.

N300 Pro

NAS Hard Drives

Capacity *1	10 TB	8 TB	8 TB	6 TB	6 TB	4 TB	4 TB
Parts Number	HDWG71AUZSVB	HDWG780UZSVB	HDWG480UZSVB	HDWG760UZSVB	HDWG460UZSVB	HDWG740UZSVD	HDWG440UZSVB
Basic Specifications							
Recording Technology	CMR						
Interface	SATA 6.0 Gbit/s						
Mechanical Design	Air						
Form Factor *2	3.5-inch						
Sector Size	512e						512n
Features							
Drive Bays Supported	up to 24						
24 / 7 Operation	yes						
Rotational Vibration Sensor	yes						
Shock Sensor	yes						
Performances							
Rotation Speed	7200 rpm						
Sustained data transfer rate *3	281 MB/s (268 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)	232 MB/s (222 MiB/s)
Buffer Size *4	512 MiB	256 MiB	512 MiB	256 MiB	512 MiB	256 MiB	256 MiB
Reliability							
MTTF / MTBF *5	1 200 000 hours						
Unrecoverable Error Rate	1 per 10E15						
Maximum rated workload *6	300 TB/year						
Load/Unload cycles	600 000 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	7.17 W
	Active Idle	5.74 W	4.92 W	5.62 W	4.14 W	4.89 W	4.07 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)					
	Non-operating	29.4 m/s ² {3.0 G} (5 to 500 Hz)					
Shock	Operating	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.)	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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