

# 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 550 TB/year and a capacity of up to 24 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 550 TB/year
- MTTF/MTBF 1.2 million hours
- 7200 rpm speed with up to 1 GiB buffer
- CMR technology
- 3.5-inch Form Factor

### Capacities

24 TB	22 TB	20 TB	18 TB	16 TB	14 TB
12 TB	10 TB	8 TB	6 TB	4 TB	



## N300 Pro



Capacity *1	24 TB	22 TB	20 TB	18 TB	16 TB	14 TB	12 TB
Parts Number	MN11ACA24T HDWG82EUZSVB	HDWG62CUZSVB	HDWG62AUZSVB	HDWG51JUZSVB	HDWG51GUZSVB	HDWG51EUZSVB	HDWG51CUZSVB
Part Number (Retail Package) *2	HDWG82E*ZSTB	HDWG62C*ZSTB	HDWG62A*ZSTB	HDWG51J*ZSTB	HDWG51G*ZSTB	HDWG51E*ZSTB	HDWG51C*ZSTB

<b>Basic Specifications</b>							
Recording Technology	CMR						
Interface	SATA 6.0 Gbit/s						
Mechanical Design	He						
Form Factor *3	3.5-inch						
Sector Size	512e						

<b>Features</b>							
Drive Bays Supported	up to 24						
24 / 7 Operation	yes						
Rotational Vibration Sensor	yes						
Shock Sensor	yes						

<b>Performances</b>							
Rotation Speed	7200 rpm						
Sustained data transfer rate *4	309 MB/s (295 MiB/s)	281 MB/s (268 MiB/s)					
Buffer Size *5	1 GiB	512 MiB					

Reliability		
MTTF / MTBF *6	2 500 000 hours	1 200 000 hours
Unrecoverable Error Rate	1 per 10E15	1 per 10E14
Maximum rated workload *7	550 TB/year	300 TB/year
Load/Unload cycles	600 000 times	

<b>Power Requirements</b>							
Supply Voltage	12 VDC ±10 % 5 VDC +10 / -7 %						
Power Consumption	Operating	7.62 W	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.)	

<b>Physical</b>							
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.

\*6 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.

N300 Pro

 NAS Hard Drives

Capacity *1	10 TB	8 TB	8 TB	6 TB	6 TB	4 TB	4 TB
Parts Number	MN10ADA10T HDWG71AUZSVB	MN10ADA800 HDWG780UZSVB	HDWG480UZSVB	MN10ADA600 HDWG760UZSVB	HDWG460UZSVB	MN10ADA400E HDWG740UZSVD	HDWG440UZSVB
Part Number (Retail Package) *2	HDWG71A*ZSTB	HDWG780*ZSTB	HDWG480*ZSTB	HDWG760*ZSTB	HDWG460*ZSTB	HDWG740*ZSTD	HDWG440*ZSTB

Basic Specifications							
Recording Technology	CMR						
Interface	SATA 6.0 Gbit/s						
Mechanical Design	Air						
Form Factor *3	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 *4	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)	
Buffer Size *5	512 MiB	256 MiB	512 MiB	256 MiB	512 MiB	256 MiB	

Reliability							
MTTF / MTBF *6	1 200 000 hours						
Unrecoverable Error Rate	1 per 10E15						
Maximum rated workload *7	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 <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)					
Shock	Operating	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							
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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