

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	

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

NAS Hard Drives



N300 Pro

NAS Hard Drives

Capacity *1	24 TB	22 TB	20 TB	20 TB	18 TB	18 TB
Part Number	MN11ACA24T HDWG82EUZSVB	MN11ACA22T HDWG82CUZSVB	MN11ACA20T HDWG82AUZSVB	HDWG62AUZSVB	MN11ACA18T HDWG81JUZSVB	HDWG51JUZSVB
Part Number (Retail Package) *2	HDWG82E*ZSTB	HDWG82C*ZSTB	HDWG82A*ZSTB	HDWG62A*ZSTB	HDWG81J*ZSTB	HDWG51J*ZSTB

Basic Specifications

Recording Technology	CMR
Interface	SATA 6.0 Gbit/s
Mechanical Design	He
Form Factor *3	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 *4	309 MB/s (295 MiB/s)	298 MB/s (284 MiB/s)	294 MB/s (280 MiB/s)	281 MB/s (268 MiB/s)	294 MB/s (280 MiB/s)	281 MB/s (268 MiB/s)
Buffer Size *5	1 GiB		512 MiB		1 GiB	512 MiB

Reliability

MTTF / MTBF *6	2 500 000 hours		1 200 000 hours	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	550 TB/year	300 TB/year	
Load/Unload cycles	600 000 times					

Power Requirements

Supply Voltage	12 VDC ±10 % 5 VDC +10 / -7 %					
Power Consumption	Operating	7.62 W		8.02 W	7.41 W	7.48 W
	Active Idle	4.35 W		4.14 W	4.16 W	4.14 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	730 g (Max)		720 g (Max)	730 g (Max)	720 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.
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Capacity *1	16 TB	16 TB	14 TB	14 TB	12 TB
Part Number	MN11ACA16T HDWG81GUZSVB	HDWG51GUZSVB	MN11ACA14T HDWG81EUZSVB	HDWG51EUZSVB	HDWG51CUZSVB
Part Number (Retail Package) *2	HDWG81G*ZSTB	HDWG51G*ZSTB	HDWG81E*ZSTB	HDWG51E*ZSTB	HDWG51C*ZSTB

Basic Specifications

Recording Technology	CMR
Interface	SATA 6.0 Gbit/s
Mechanical Design	He
Form Factor *3	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 *4	294 MB/s (280 MiB/s)	281 MB/s (268 MiB/s)	294 MB/s (280 MiB/s)	281 MB/s (268 MiB/s)	
Buffer Size *5	1 GiB	512 MiB	1 GiB	512 MiB	

Reliability

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

Power Requirements

Supply Voltage	12 VDC ±10 % 5 VDC +10 / -7 %					
Power Consumption	Operating	6.94 W	7.48 W	6.94 W	7.38 W	6.85 W
	Active Idle	3.66 W	4.14 W	3.66 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)	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)	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	730 g (Max)	720 g (Max)	730 g (Max)	705 g (Max)	690 g (Max)

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Capacity *1	10 TB	8 TB	8 TB	6 TB	6 TB	4 TB	4 TB
Part 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

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	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/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.)

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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