

NAS

# N300 NAS Hard Drive

Built for 24/7 reliability



16 TB 14 TB 12 TB 10 TB 8 TB 6 TB 4 TB

Color

EMEA Region, Toshiba Storage Solutions - The 3.5-inch 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 x 7-day high-capacity storage for personal, home office and small business use. The N300 is available in capacities of up to 16 TB.

Use for:

- Network Attached Storage (NAS)
- Desktop RAID and servers
- Multimedia server storage
- Private cloud storage
- Small business server and storage



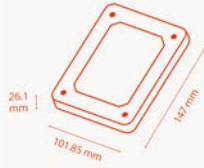
- SATA** 3.5" SATA Hard Drive
- RPM** 7200 rpm
- 256/512 MB buffer
- 24/7** 24/7 operation
- Supports 1-to-8 bay NAS
- High reliability and enhanced real-time performance
- Toshiba Dynamic Cache Technology
- Toshiba Stable Platter Technology
- High-endurance design
- Error recovery control
- Temperature control
- 3-year warranty

## Manual

[Installation-and-Safety-Internal-HDDs.pdf](#)



# Product Specifications



## Basic Specifications

<b>Form factor</b>	3.5-inch
<b>Interface</b>	SATA 6.0 Gbit/s
<b>Drive bays supported</b>	1 to 8
<b>Rotational Vibration (RV) Sensors</b>	yes
<b>Advanced Format (AF)</b>	yes
<b>RoHS compatible</b>	yes
<b>Halogen Free</b>	Yes
<b>Shock Sensor</b>	yes

## Performance

<b>Rotational speed</b>	7,200 rpm
<b>Buffer size</b>	512 MB (16 TB, 14 TB), 256 MB (4 TB - 12 TB)
<b>Data transfer speed</b>	274 MB/s typ. (16 TB), 260 MB/s typ. (14 TB), 253 MB/s typ. (12 TB), 248 MB/s Typ. (10 TB), 248 MB/s Typ. (8 TB), 239 MB/s Typ. (6 TB), 232 MB/s Typ. (4 TB)
<b>Average latency</b>	4.17 ms
<b>Native Command Queing (NCQ)</b>	supported

## Reliability

<b>Workloads</b>	180 TB/year
<b>MTTF</b>	1,200,000 hours (16 TB, 14 TB) / 1,000,000 hours
<b>Unrecoverable error rate</b>	1 per 1014 bits read (10 TB - 16 TB), 1 per 1015 bits read (4 TB - 8 TB)
<b>24/7 operation</b>	yes
<b>Limited warranty</b>	3 years

## Power Management

<b>Supply voltage</b>	5VDC (+10%/-7%) / 12VDC ( $\pm 10\%$ ) (16 TB, 14 TB) 5VDC (+10%/-5%) / 12VDC ( $\pm 10\%$ ) (6 TB - 10 TB) 5VDC ( $\pm 5\%$ ) / 12VDC ( $\pm 10\%$ ) (4 TB, 12 TB)
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## Box Content

<b>Box Content</b>	3.5-inch internal hard drive - N300 NAS Hard Drive
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## Physical

<b>Weight (approx.)</b>	693 g max. (4 TB), 700 g max. (6 TB), 770 g max. (10 TB), 720 g max. (8 TB, 12 TB - 16 TB)
<b>Dimensions</b>	147 (L) x 101.85 (W) x 26.1 (H) mm

## Environmental

<b>Acoustics (idle mode)</b>	20 dB typ. (12 TB - 16 TB), 34 dB typ. (10 TB), 31 dB typ. (4 TB - 8 TB)
<b>Shock (non-operating)</b>	2450 m/s <sup>2</sup> (250 G) / 2 ms duration
<b>Shock (operating)</b>	686 m/s <sup>2</sup> (70 G) / 2 ms duration
<b>Vibration (non-operating)</b>	29.4 m/s <sup>2</sup> (3.0 G) (5 to 500Hz)
<b>Vibration (operating)</b>	10 TB - 16 TB: 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) 4 TB - 8 TB: 7.35 m/s <sup>2</sup> {0.75 G} (2 to 300 Hz) 4.90 m/s <sup>2</sup> {0.50 G} (300 to 350 Hz) 2.45 m/s <sup>2</sup> {0.25 G} (350 to 500 Hz)
<b>Temperature (operating / non-operating)</b>	0 to 65° C / -40 to 70° C (10 TB, 14 TB, 16 TB) 5 to 65° C / -40 to 70° C (4 TB - 8 TB, 12 TB)

## Power Management

<b>Consumption - Active Idle</b>	4.03 W typ. (16 TB, 14 TB) 4.28 W typ. (12 TB), 7.22 W typ. (10 TB), 5.61 W typ. (8 TB), 4.93 W typ. (6 TB), 4.04 W typ. (4 TB)
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# Product Range

Part number	Capacity	Color
HDWG31GUSVA (Bulk)	16 TB	-
HDWG31EEZSTA (Retail)	14 TB	-
HDWG31EUSVA (Bulk)	14 TB	-
HDWG21CEZSTA (Retail)	12 TB	-
HDWG21CUSVA(Bulk)	12 TB	-
HDWG11AEZSTA (Retail)	10 TB	-
HDWG11AUSVA (Bulk)	10 TB	-
HDWG480EZSTA (Retail)	8 TB	-
HDWG480USVA (Bulk)	8 TB	-
HDWG460EZSTA (Retail)	6 TB	-
HDWG460USVA (Bulk)	6 TB	-
HDWG440EZSTA (Retail)	4 TB	-
HDWG440USVA (Bulk)	4 TB	-

## Logistical Information:

Box dimensions	189.0 mm (H) x 136.0 mm (W) x 60.0 mm (D)
Box weight (gross)	915 g max.
Master carton dimensions	265 x 150 x 210 mm
Master carton weight (gross)	3914 g max.
Boxes per master carton	4 pcs
Pallet dimensions	1150 x 1150 x 130 mm
Pallet weight (net)	n/A
Units per pallet	480 pcs
Units per carton	20 pcs.
Carton dimensions	500 x 310 x 228 mm (12 TB - 16 TB), 410 x 308 x 228 mm (4 TB - 10 TB)
Carton weight (gross)	17 kg (typ.), 16 kg (typ.) (4TB)
Units per pallet	600 pcs.

## Contact

### Toshiba Electronics Europe GmbH

Hansaallee 181  
40549 Düsseldorf  
Germany