

**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

Toshiba's 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
- 128/256/512 MB buffer
- 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

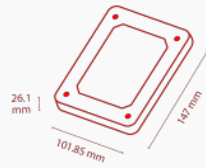
[Toshiba Installation and Safety.pdf](#)

## Tools

[TOSHIBA Storage Diagnostic Tool.zip](#)



# 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), 256 MB (10 TB - 14 TB), 128 MB (4 TB - 8 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), 241 MB/s Typ. (6 TB, 8 TB), 204 MB/s Typ. (4 TB)
<b>Average latency</b>	4.17 ms
<b>Native Command Queuing (NCQ)</b>	supported

## Reliability

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

## Power Management

<b>Supply voltage</b>	5VDC (+10%/-7%) / 12VDC (±10%) (16 TB) 5VDC (+10%/-5%) / 12VDC (±10%) (10 TB) 5VDC (±5%) / 12VDC (±10%)
-----------------------	---

## Box Content

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

## Physical

<b>Weight (approx.)</b>	770 g max. (6 TB - 10 TB), 720 g max. (4 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), 33 dB typ. (6 TB, 8 TB), 30 dB typ. (4 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) (10 TB - 16 TB), 49.0 m/s <sup>2</sup> (5.0 G) (5 to 500Hz) or less (4 TB - 8 TB)
<b>Vibration (operating)</b>	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)
<b>Temperature (operating / non-operating)</b>	0 to 65° C / -40 to 70°C 5 to 65° C / -40 to 70°C (12 TB - 16 TB)

## Power Management

<b>Consumption - Active Idle</b>	4.03 W typ. (16 TB), 4.54 W typ. (14 TB), 4.28 W typ. (12 TB), 7.22 W typ. (10 TB), 6.2 W typ. (8 TB), 6.7 W typ. (6 TB), 5.2 W typ. (4 TB)
----------------------------------	---

# Product Range

Part number	Capacity	Color
HDWG31GUSVA (Bulk)	16 TB	-
HDWG21EEZSTA (Retail)	14 TB	-
HDWG21EUSVA (Bulk)	14 TB	-
HDWG21CEZSTA (Retail)	12 TB	-
HDWG21CUSVA(Bulk)	12 TB	-
HDWG11AEZSTA (Retail)	10 TB	-
HDWG11AUSVA (Bulk)	10 TB	-
HDWN180EZSTA (Retail)	8 TB	-
HDWN180USVA (Bulk)	8 TB	-
HDWN160EZSTA (Retail)	6 TB	-
HDWN160USVA (Bulk)	6 TB	-
HDWQ140EZSTA (Retail)	4 TB	-
HDWQ140USVA (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	410 x 308 x 228 mm; 486 x 296 x 200 mm (12TB, 14TB, 16TB)
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