



## Designed for NAS

### High-Reliability Hard Drive N300



Toshiba's N300 3.5-inch internal hard disk 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 8 TB.

Use for:

- 1- to 8-bay NAS
- Desktop RAID and servers
- Multimedia server storage

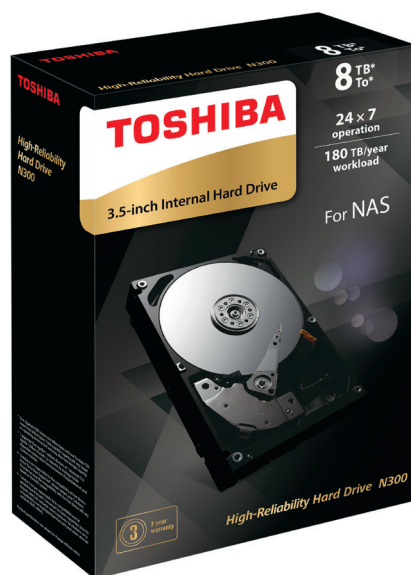
**Designed for NAS**  
The drive, which, can support multi-RAID systems with up to 8 hard disk drives, allows large volumes of data to be reliably stored and accessed by multiple clients 24 hours a day, 365 days a year.

**Integrated RV sensors**  
Multiple sensors detect the slightest shock and built-in RV sensors also compensate for rotational vibration - eliminating the possibility of 'knock-on' vibration in multi-bay NAS configurations system.

**Reliable 'always-on' operation**  
Today's NAS drives must deliver high data transfer rates and simultaneous upload and download 24-hours x 7-days. Offering high reliability and scalability, N300 drives achieve max. 180 TB/year workload factor.

## Top features:

- Optimal for 1-to-8 bay NAS
- High reliability and enhanced real-time performance
- High anti-oscillation performance
- Heat prevention technology
- High-endurance design
- Data protection technology



### Specifications and Performance

Part numbers:	N300 - High-Reliability Hard Drive, 8 TB:	HDWN180EZSTA (Retail)
	N300 - High-Reliability Hard Drive, 6 TB:	HDWN160EZSTA (Retail)
	N300 - High-Reliability Hard Drive, 4 TB:	HDWQ140EZSTA (Retail)

#### Basic Specifications

Form factor:	3.5-inch
Interface:	SATA 6.0 Gbit/s
Available capacities:	8 TB, 6 TB, 4 TB
Drive bays supported:	1 to 8
Advanced Format (AF):	(8TB & 6TB)
RoHS compatible:	yes
Halogen Free:	yes

#### Performance

Rotational speed:	7,200 rpm
Data transfer speed:	240MB/s (8TB), 210MB/s (6TB), 200MB/s (4TB)
Buffer size:	128 MB
Average latency:	4.17 ms
Native Command Queing (NCQ):	supported

#### Reliability

Workloads:	180 TB/year
MTTF:	1,000,000 hours
Unrecoverable error rate:	1 per 10E14 bits read
Limited warranty:	3 years

#### Power Management

Supply voltage:	5VDC (±5%) / 12VDC (±10%)
Consumption (operating):	9.2 W typ. (8 TB), 10.1 W typ. (6 TB), 9.6 W typ. (4 TB)
Consumption (active idle):	6.2 W typ. (8 TB), 6.7 W typ. (6 TB), 5.2 W typ. (4 TB)

#### Environmental

Temperature (operating / non-operating):	0 to 60 C / -40 to 70 °C
Vibration (operating):	0.75 G (5 to 300 Hz) 0.25 G (300 to 500 Hz) or less
Vibration (non-operating):	5 G (5 to 500Hz) or less
Shock (operating):	70 G / 2 ms duration
Shock (non-operating):	250 G / 2 ms duration
Acoustics (idle mode):	33 dB typ. (6 & 8 TB), 30 dB typ. (4 TB)
Acoustics (seek mode):	35 dB typ. (6 & 8 TB), 34 dB typ. (4 TB)
Dimensions:	147 (L) x 101.85 (W) x 26.1 (H) mm
Weight:	770 g max. (6 & 8 TB), 720 g max. (4 TB)

#### Box Content

- 3.5-inch internal hard drive - N300 High-Reliability Hard Drive