Toshiba N300 NAS

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Toshiba

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.

Designed for NAS
Through its contact with NAS manufacturers, Toshiba recognizes the need for high-reliability disks in support of modern data storage and retrieval demands including streaming, backup and archiving. 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
Regular hard disk drives without RV sensors can affect the performance of a multi-bay NAS System by generating 'knock-on' vibration. N300 drives ensure high reliability by minimising vibration effects through their advanced control and sensing technology. 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 configuration systems.

Reliable always-on operation
NAS systems in small businesses or creative environments often need to be accessed by several users, at different locations, simultaneously. Therefore today's NAS drives must deliver high data transfer rates and simultaneous upload and download 24 hours a day, 7 days a week. Offering high reliability and scalability, N300 drives achieve a max. 180 TB/year workload factor, up to 3 times more than convenient desktop hard drives.

High durability and heat prevention
Use of high-endurance components is one of the reasons that the N300 series offers better durability than other conventional hard disk drives. At the same time, automatic adjustment of seek speed to reduce heat during high-temperature operation further improves endurance in demanding situations.

High speed for multi-drive enviroment
High performance and fast read speed is made possible under high data access loads from multiple users thanks to 512, 256 or 128 MB data buffer. This makes the drive suitable for small businesses and creative professionals looking for solutions to handle high data volumes using multi-RAID NAS environments.

Optimised cache allocation
Toshiba’s Dynamic Cache Technology, a self-contained cache algorithm with on-board buffer management, optimizes how the cache is allocated during read/write to provide the high-level performance demanded by real-time domains.

Reduced noise and energy costs
The 12 TB, 14 TB and 16 TB N300 NAS Hard Drives use a helium-sealed design, achieving low power consumption while increasing storage density. Toshiba Group’s laser welding technology ensures that the helium remains securely sealed inside the drive enclosure. With the environment in mind, the helium-filled N300 models minimize acoustic output to just 20db (typical) in idle mode.

The devices are ideal for large scale server systems allowing for rich scalability of up to 8 drives.

Built to deliver, designed to last
Toshiba is renowned the world over for 50 years of leading innovation – and the power behind its range of hard drives is no exception. Designed for high capacity and excellent performance, you can be sure that Toshiba's wealth of experience in hard drives is at work in your storage system. A three year extended warranty is also included with the N300 for the ultimate peace of mind.

Zusammenfassung

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.

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Toshiba N300 NAS, 3.5", 6 TB, 7200 RPM

Toshiba N300 NAS. HDD size: 3.5", HDD capacity: 6 TB, HDD speed: 7200 RPM

Merkmale

Logistics data

Harmonized System (HS) code	84717050

Technical details

Sustainability certificates	RoHS
Doesn't contain	Halogen

Power

Power consumption (typical)	7.22 W
Power consumption (idle)	4.93 W
Operating voltage	5 / 12 V

Packaging data

Package width	136 mm
Package depth	60 mm
Package weight	915 g
Package height	189 mm

Weight & dimensions

Width	101.8 mm
Height	147 mm
Depth	26.1 mm
Weight	700 g

Operational conditions

Operating temperature (T-T)	5 - 65 °C
Storage temperature (T-T)	-40 - 70 °C
Operating vibration	0.25 G
Non-operating vibration	3 G
Operating shock	70 G
Non-operating shock	250 G

Features

HDD size	3.5"
HDD capacity	6 TB
HDD speed	7200 RPM
Interface	Serial ATA III
Type	HDD
Component for	NAS
Storage drive buffer size	256 MB
HDD interface transfer rate	6 Gbit/s
HDD average transfer rate	239 MB/s
Average latency	4.17 ms
Uncorrectable Bit Error Rate (UBER)	< 1 per 10^15 bits read
Error Recovery Control (ERC)	Y
Temperature control	Y
Toshiba Dynamic Cache Technology	Y
Toshiba Stable Platter Technology	Y
Rotational Vibration (RV) sensors	Y
Advanced Format (AF)	Y
Shock sensor	Y
24/7 operation	Y
Native Command Queuing (NCQ)	Y
Workload rate limit	180 TB/year
Noise level (idle)	31 dB
Mean time to failure (MTTF)	1000000 h