



Deskstar® NAS

3.5-Inch High-Performance Hard Drive for Desktop NAS Systems

Highlights

- 7200 RPM performance
- Up to 8TB capacity¹
- 1 million hours MTBF²
- 6Gb/s SATA interface
- No additional hardware required
- 3-Year limited warranty

Applications/Environments

- Desktop NAS System

More Performance, More Reliability

The Deskstar® NAS hard drive is a 7200 RPM 3.5-inch hard drive that provides an exceptional blend of reliability and performance, making it an ideal solution for consumer and commercial desktop NAS systems. This NAS-ready hard drive from HGST delivers media transfer rates that are as much as 20% faster than 5400 RPM drives and seek times less than 12ms. Furthermore, Deskstar NAS hard drives incorporate a rotational vibration sensor and achieve reliability of 1M hours MTBF.

HGST Quality and Service

All HGST hard drives are designed to the highest quality standards with field-proven components. They are backed by HGST worldwide technical support and integration services, enabling customers around the globe to bring their products to market quickly.

Features and Benefits

	Feature / Function	Benefits
Capacity	3TB, 4TB, 5TB, 6TB and 8TB	Large storage capacity
Performance	64MB cache buffer (3TB and 4TB) 128MB cache buffer (5TB, 6TB and 8TB)	Faster data processing
Rotational Speed	7200 RPM	Faster data transfer rates
Reliability	1M Hours MTBF	Reduced risk of data loss
	Rotational Vibration Sensor	Optimal reliability in multi-drive RAID arrays
	Availability ²	24x7



**Up to 8TB
7200 RPM
20% FASTER
THAN OTHER 5400 RPM
HARD DRIVES!**

Drive Model #	Capacity	Kit Model #	SKU
HDN728080ALE604	8TB	H3IKNAS800012872SWW H3IKNAS800012872SCN H3IKNAS800012872SWW2PK H3IKNAS800012872SWW4PK	OS04012 OS04017 OS04018 OS04019
HDN726060ALE614	6TB	H3IKNAS600012872SN H3IKNAS600012872SE H3IKNAS600012872SA H3IKNAS600012872SJ	OS03839 OS03840 OS03841 OS03842
HDN726050ALE610	5TB	H3IKNAS500012872SN H3IKNAS500012872SE H3IKNAS500012872SA H3IKNAS500012872SJ	OS03835 OS03836 OS03837 OS03838
HDN724040ALE640	4TB	H3IKNAS40003272SN H3IKNAS40003272SE H3IKNAS40003272SA H3IKNAS40003272SJ	OS03664 OS03665 OS03666 OS03667
HDN724030ALE640	3TB	H3IKNAS30003272SN H3IKNAS30003272SE H3IKNAS30003272SA H3IKNAS30003272SJ	OS03660 OS03661 OS03662 OS03663

Specifications

	8TB	6TB and 5TB	4TB and 3TB
Configuration			
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Capacity (GB) ¹	8TB	6TB / 5TB	4TB / 3TB
Max. areal density (Gbits/sq. in)	664	703/586	446/425
Performance			
Data buffer (MB) ³	128MB	128MB	64MB
Rotational speed	7200 RPM	7200 RPM	7200 RPM
Sustained Transfer Rate(MB/s, typ.)	205	227/202	171
Interface transfer rate (MB/s, max)	600	600	600
Reliability			
Error rate (non-recoverable, bits read)	1 in 10 ¹⁴	1 in 10 ¹⁴	1 in 10 ¹⁴
Load/unload cycles (at 40° C)	600,000	600,000	600,000
Availability (hrs/day x days/wk)	24x7	24x7	24x7
MTBF (M hours)	1.0	1.0	1.0
Power			
Requirement	+5VDC, +12VDC	+5VDC, +12VDC	+5VDC, +12VDC
Startup current (A, max.)	(1.2A, max +5V, 2A @ +12V)	(1.2A, max +5V, 2A @ +12V)	(1.2A, max +5V, 2A @ +12V)
Idle (W, avg.)	5.1	7.3	6.9
Physical size			
z-height (mm)	26.1	26.1	26.1
Dimensions (width x depth, mm)	101.6 (+/-0.25) x 147	101.6 (+/-0.25) x 147	101.6 (+/-0.25) x 147
Weight (g, max.)	650	715	690
Environmental (operating)			
Ambient temperature	5° to 60° C	5° to 60° C	5° to 60° C
Relative humidity (non-condensing)	8% to 90%	8% to 90%	8% to 90%
Shock (half-sine wave, G)	70	70	70
Vibration (G RMS 5 to 500 Hz)	0.67 (XYZ)	0.67 (XYZ)	0.67 (XYZ)
Environmental (non-operating)			
Ambient temperature	-40° to 70° C	-40° to 70° C	-40° to 70° C
Relative humidity (non-condensing)	5% to 95%	5% to 95%	5% to 95%
Shock (half-sine wave, G (2ms))	300	300	300
Vibration, random (G RMS 2 to 200 Hz)	1.04 (XYZ)	1.04 (XYZ)	1.04 (XYZ)

¹ One GB is equal to one billion bytes and one TB equals 1,000GB (one trillion bytes) when referring to hard drive capacity. Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drive, the computer's operating system, and other factors.

² Intended for lower duty cycle environments in the enterprise storage hierarchy such as nearline applications. MTBF target is based on a sample population and is estimated by statistical measurements and acceleration algorithms under median operating conditions. MTBF ratings are not intended to predict an individual drive's reliability. MTBF does not constitute a warranty

³ Portion of buffer capacity used for firmware