SKYHAWK AI SURVEILLANCE

SEAGATE

3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure.
Surveillance Optimized and Edge Ready



Seagate® SkyHawk™ AI 18TB is a surveillance-optimized drive designed for NVRs with artificial intelligence (AI) for edge applications.



Best-Fit Applications

- Network video recorders (NVR)
- AI-enabled NVR systems

SKYHAWK HEALTH

Key Advantages

ImagePerfect™ AI firmware delivers zero dropped frames while supporting heavier workloads.

Versatile capabilities intelligently adapt to the scale of your AI environment, supporting up to 64 HD video streams and 32 AI streams.

SkyHawk Health Management actively helps protect your surveillance storage by focusing on prevention, intervention, and recovery options.[1] Included RAID RapidRebuild™ provides 3× faster volume rebuilds.

Higher reliability with 2M hours MTBF and a 550TB/year workload rate for more than 3× that of standard surveillance hard drives.

Powerful processing to welcome workload challenges—SkyHawk AI supports video analysis and recording simultaneously with GPU analytics workloads.

Enjoy consistent performance with built-in rotational vibration sensors providing reliable storage for NAS with little lag or downtime.

Multi-bay support helps you meet your growing storage demands with up to 16+ bays.

1 Contact your Seagate sales representative for further information.

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Specifications	18TB	16TB	14TB	12TB	10TB
Capacity	18TB	16TB	14TB	12TB	10TB
Standard Model Numbers	ST18000VE000	ST16000VE000	ST14000VE0008	ST12000VE0008	ST10000VE0008
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design	Helium	Helium	Helium	Helium	Helium
Features and Performance					
Drive Bays Supported	16+	16+	16+	16+	16+
AI Channels	32	32	32	32	32
AI Real Time Capture Events/Sec[1,2]	Up to 120	Up to 120	Up to 120	Up to 120	Up to 120
AI Real Time Compare Events/Sec[1,2]	Up to 96	Up to 96	Up to 96	Up to 96	Up to 96
HD Cameras Supported[3]	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64
RV Sensors	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	250MB/s	250MB/s	250MB/s	250MB/s	250MB/s
Cache (MB)	256	256	256	256	256
Reliability/Data Integrity					
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours per year	8760	8760	8760	8760	8760
Workload Rate Limit (WRL)[4]	550	550	550	550	550
Mean Time Between Failures (MTBF) (hours)	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr	2,000,000hr
Warranty, Limited (years)[5]	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	2.0	1.8	1.8	1.8	1.8
Average Operating Power (W)	8.0W	6.71W	6.9W	6.9W	6.9W
Idle Average (W)	5.3W	5.1W	4.9W	4.9W	4.9W
Standby Mode/Sleep Mode, Typical (W)	1.3/1.3	1.05/1.05	1.2/1.2	1.2/1.2	1.2/1.2
Voltage Tolerance (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%	±10%	±10%	±10%
Environmental/Temperature					
Operating (ambient, min °C)	0	5	5	5	5
Operating (drive case, max °C)[6]	65	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40	-40
Physical					
Height (mm/in, max)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb, typical)	670g/1.477lb	670g/1.477lb	690g/1.521lb	690g/1.521lb	690g/1.521lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

1 Events can be human, vehicle, or object capture.

2 Tested and verified using embedded AI NVR – 64-ch HD recording, 16-ch PB. Average picture size ~250 KB

3 1080P, H.265, 25 fps

4 SkyHawk AI surveillance drives are designed for always-on workloads of 550TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.

5 Extended warranty options available. Consult your distributor for details.

6 Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the product.

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Specifications	8TB
Capacity	8TB
Standard Model Numbers	ST8000VE000
Interface	SATA 6Gb/s
Recording Technology	CMR
Drive Design	Air
Features and Performance	
Drive Bays Supported	16+
AI Channels	32
AI Real Time Capture Events/Sec[1,2]	Up to 120
AI Real Time Compare Events/Sec[1,2]	Up to 96
HD Cameras Supported[3]	Up to 64
RV Sensors	Yes
Max. Sustained Transfer Rate OD (MB/s)	235MB/s
Cache (MB)	256
Reliability/Data Integrity	
Tarnish Resistant	Yes
Load/Unload Cycles	300,000
Nonrecoverable Read Errors Rate, Max	1 per 10E15
Power-On Hours per year	8760
Workload Rate Limit (WRL)[4]	550
Mean Time Between Failures (MTBF) (hours)	2,000,000hr
Warranty, Limited (years)[5]	3
Power Management	
Startup Current, Typical (12V, A)	1.8
Average Operating Power (W)	8.73W
Idle Average (W)	7.5W
Standby Mode/Sleep Mode, Typical (W)	0.96/0.96
Voltage Tolerance (5V)	+10%/-5%
Voltage Tolerance (12V)	±10%
Environmental/Temperature	
Operating (ambient, min °C)	5
Operating (drive case, max °C)[6]	70
Nonoperating (ambient, min °C)	-40
Physical	
Height (mm/in, max)	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in
Weight (g/lb, typical)	716g/1.579lb
Carton Unit Quantity	20
Cartons per Pallet/Cartons per Layer	40/8

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