SKYHAWK AI™

SEAGATE

3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure.
Video Optimised and Edge Ready



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



Best-Fit Applications

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

SKYHAWK HEALTH

Rescue DATA RECOVERY SERVICES

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.

Rescue Data Recovery Services.[2] SkyHawk AI comes with extra peace of mind for any mechanical, accidental, or natural disaster. With a 95% success rate of in-house recovery, Seagate has your back with a 3-year included Rescue Services plan.

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

Class-Leading Reliability and Dependability SkyHawk AI drives are rated for 2M hours MTBF and a 550 TB/year workload rate for more than 3x that of standard surveillance hard drives. Backed by a 5-year limited warranty.

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 NVR 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.

SKYHAWK AI™



Specifications	18 TB	16 TB	12 TB	10 TB	10 TB
Capacity	18TB	16TB	12TB	10TB	10TB
Standard Model Numbers	ST18000VE002	ST16000VE002	ST12000VE001	ST10000VE0008	ST10000VE001
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Recording Technology	CMR	CMR	CMR	CMR	CMR
Drive Design	Helium	Helium	Helium	Helium	Air
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)	260MB/s	250MB/s	250MB/s	250MB/s	245MB/s
Cache (MB)	256	256	256	256	256
Reliability/Data Integrity					
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Load/Unload Cycles	600,000	600,000	600,000	600,000	600,000
Non-recoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours per year	8,760	8,760	8,760	8,760	8,760
Workload Rate Limit (WRL)[4]	550	550	550	550	550
Mean Time Between Failures (MTBF) (hours)	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr	2,000,000 hr
Warranty, Limited (years)[5]	5	5	5	5	5
Rescue Data Recovery Services (years)[6]	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	2	2	2	1.8	2
Average Operating Power (W)	8 W	8 W	8 W	6.9 W	10.1 W
Idling Average (W)	5.3 W	5.3 W	5.3 W	4.9 W	7.8 W
Standby Mode/Sleep Mode, Typical (W)	1.3/1.3	1.3/1.3	1.3/1.3	1.2/1.2	1/1
Voltage Tolerance (5 V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%	±10%
Environmental/Temperature					
Operating (Ambient, min °C)[7]	0	0	0	0	0
Operating (drive reported, max °C)[7]	65	65	65	65	65
Non-operating (ambient, min °C)	-40	-40	-40	-40	-40
Physical					
Height (mm/in, max)	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in
Width (mm/in, max)	101.85 mm/4.01 in	101.85 mm/4.01 in	101.85 mm/4.01 in	101.85 mm/4.01 in	101.85 mm/4.01 in
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in
Weight (g/lb, typical)	670 g/1.477 lb	670 g/1.477 lb	670 g/1.477 lb	690 g/1.521 lb	720 g/1.587 lb
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 550 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.

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

6 From May 1, 2020, 3-year Rescue Data Recovery Services plan may be offered in addition to standard warranty. This is offered for selected regions only. Check with reseller on availability.

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

SKYHAWK AI™



Specifications	8 TB
Capacity	8TB
Standard Model Numbers	ST8000VE001
Interface	SATA 6 Gb/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)	245MB/s
Cache (MB)	256
Reliability/Data Integrity	
Tarnish Resistant	Yes
Load/Unload Cycles	600,000
Non-recoverable Read Errors Rate, Max	1 per 10E15
Power-On Hours per year	8,760
Workload Rate Limit (WRL)[4]	550
Mean Time Between Failures (MTBF) (hours)	2,000,000 hr
Warranty, Limited (years)[5]	5
Rescue Data Recovery Services (years)[6]	3
Power Management	
Startup Current, Typical (12V, A)	2
Average Operating Power (W)	10.1 W
Idling Average (W)	7.8 W
Standby Mode/Sleep Mode, Typical (W)	1/1
Voltage Tolerance (5 V)	±5%
Voltage Tolerance (12 V)	±10%
Environmental/Temperature	
Operating (Ambient, min °C)[7]	0
Operating (drive reported, max °C)[7]	65
Non-operating (ambient, min °C)	-40
Physical	
Height (mm/in, max)	26.11 mm/1.028 in
Width (mm/in, max)	101.85 mm/4.01 in
Depth (mm/in, max)	146.99 mm/5.787 in
Weight (g/lb, typical)	720 g/1.587 lb
Carton Unit Quantity	20
Cartons per Pallet / Cartons per Layer	40/8

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