

3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure.
Optimised for Surveillance AI Applications



Seagate® SkyHawk™ AI is the world's first, purpose-built drive for artificial intelligence (AI)-enabled surveillance solutions.



Best-Fit Applications

- Network video recorders (NVR)
- AI-enabled NVR systems
- Video-edge NVRs
- NVRs with advanced analytics

Key Advantages

ImagePerfect™ AI firmware for superior image integrity alongside additional AI workload support in always-on, AI-enabled surveillance systems.

Custom designed to support an additional 16 AI streams while simultaneously and flawlessly recording footage up to 64 HD cameras.

Designed to handle heavy workloads expected in always-on, AI-enabled surveillance systems. At 550 TB/year, SkyHawk AI is designed for more than 3× the workload of standard surveillance drives.

Advanced vibration management for superior and sustained performance in 16+ bay NVR systems.

Improved reliability and reduced total cost of ownership with 2 M-hr. MTBF and 5-year limited warranty.

Unparalleled data protection with a complimentary 2-year Rescue Data Recovery Services plan bundled with every SkyHawk AI drive, providing access to Seagate's secure labs with industry-leading data recovery success rates.



Specifications	14TB	12TB	10TB
Standard Model Numbers	ST14000VE0008	ST12000VE0008	ST10000VE0004
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Features and Performance			
Drive Bays Supported	16+	16+	16+
AI Streams ¹	16	16	16
HD Cameras Supported	Up to 64	Up to 64	Up to 64
RV Sensors	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	250MB/s	250MB/s	235MB/s
Cache (MB)	256	256	256
Reliability/Data Integrity			
Tarnish Resistant	Yes	Yes	Yes
Load/Unload Cycles	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours per Year (24x7)	8,760	8,760	8,760
Workload Rate Limit (WRL) ²	550	550	550
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr
Warranty, Limited (years) ³	5	5	5
Power Management			
Startup Current, Typical (12V, A)	1.8	1.8	1.8
Average Operating Power (W)	6.9 W	6.9 W	7.2 W
Idling Average (W)	4.9 W	4.9 W	4.9 W
Standby Mode/Sleep Mode, Typical (W)	1.2/1.2	1.2/1.2	0.8/0.8
Voltage Tolerance (5 V)	±5%	±5%	±5%
Voltage Tolerance (12 V)	±10%	±10%	±10%
Environmental/Temperature			
Operating (ambient, min °C)	5	5	5
Operating (drive case, max °C) ⁴	70	70	70
Non-operating (ambient, min °C)	-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
Width (mm/in, max)	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
Weight (lb/g)	690 g/1.521 lb	690 g/1.521 lb	650 g/1.433 lb
Carton Unit Quantity	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8

¹ 16 AI streams = 8 AI channels.

² 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.

³ Extended warranty options available. Consult your distributor for details.

⁴ Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the product.



Specifications	8TB	6TB	4TB
Standard Model Numbers	ST8000VE0004	ST6000VE001	ST4000VE001
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Features and Performance			
Drive Bays Supported	16+	16+	16+
AI Streams ¹	16	16	16
HD Cameras Supported	Up to 64	Up to 64	Up to 64
RV Sensors	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	235MB/s	226MB/s	226MB/s
Cache (MB)	256	256	256
Reliability/Data Integrity			
Tarnish Resistant	Yes	Yes	Yes
Load/Unload Cycles	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours per Year (24x7)	8,760	8,760	8,760
Workload Rate Limit (WRL) ²	550	550	550
MTBF	2,000,000 hr	2,000,000 hr	2,000,000 hr
Warranty, Limited (years) ³	5	5	5
Power Management			
Startup Current, Typical (12V, A)	1.8	1.8	1.8
Average Operating Power (W)	7.2 W	9.5 W	9.5 W
Idling Average (W)	4.9 W	7.5 W	7.5 W
Standby Mode/Sleep Mode, Typical (W)	0.8/0.8	0.6/0.6	0.6/0.6
Voltage Tolerance (5 V)	±5%	±5%	±5%
Voltage Tolerance (12 V)	±10%	±10%	±10%
Environmental/Temperature			
Operating (ambient, min °C)	5	5	5
Operating (drive case, max °C) ⁴	70	70	70
Non-operating (ambient, min °C)	-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
Width (mm/in, max)	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
Weight (lb/g)	650 g/1.433 lb	705 g/1.55 lb	705 g/1.55 lb
Carton Unit Quantity	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8

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