



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure. Surveillance-Optimised Storage

Seagate[®] SkyHawk^{$^{\text{TM}}$} AI is the world's first, purpose-built drive for artificial intelligence (AI)-enabled surveillance solutions.





Best-Fit Applications

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



Key Advantages

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

Custom designed to support an additional 32 AI streams while simultaneously and flawlessly recording footage up to 64 HD cameras.

Designed and built to handle heavy surveillance workloads in traditional video recording and in advanced video analytics environments. At 550 TB/year, SkyHawk AI is designed for 3× the workload of standard surveillance drives.

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

SkyHawk Health Management actively helps protect your surveillance storage by focusing on prevention, intervention, and recovery options. Included is RAID RapidRebuild, which provides $3 \times$ faster volume rebuilds.

Improved reliability and reduced total cost of ownership with 1.5M-hr. MTBF and 3-year limited warranty.

Unparalleled data protection with an optional 2-year Rescue Data Recovery Services plan, providing access to Seagate's secure labs with industry-leading data recovery success rates.

¹ Contact your Seagate sales representative for further information.





Capacity	Specifications	14 TB	12 TB	10 TB	10 TB	8 TB
Interface SATA 6 Gb/s Features and Performance	Capacity	14 TB	12 TB	10 TB	10 TB	8 TB
Postures and Performance Testures and Perfor	Standard Model Numbers	ST14000VE0008	ST12000VE0008	ST10000VE0008	ST10000VE0004	ST8000VE0004
Drive Baye Supported	Interface	SATA 6 Gb/s				
Al Streams 32 32 32 32 32 32 32 3	Features and Performance					
HD Cameras Supported	Drive Bays Supported	16+	16+	16+	16+	16+
RV Sensors Yes Ax. Sustained Transfer Rate OD (MB/s) 250MB/s 250MB/s 250MB/s 235MB/s	Al Streams	32	32	32	32	32
Max. Sustained Transfer Rate OD (MB/s) 250MB/s 250MB/s 250MB/s 235MB/s 235MB/s Cache (MB) 256 256 256 256 256 256 Reliability/Data Integrity Tamish Resistant Yes Yes <td>HD Cameras Supported</td> <td>Up to 64</td>	HD Cameras Supported	Up to 64				
Cache (MB) 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256 256	RV Sensors	Yes	Yes	Yes	Yes	Yes
Reliability/Data Integrity Tarnish Resistant Yes 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 300,000 10,000 300,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000 400,000	Max. Sustained Transfer Rate OD (MB/s)	250MB/s	250MB/s	250MB/s	235MB/s	235MB/s
Tamish Resistant Yes	Cache (MB)	256	256	256	256	256
Dead*Unload Cycles 300,000 300,000 300,000 300,000 300,000 300,000 300,000 Non-recoverable Read Errors per Bits Read, Max 1 per 10E15	Reliability/Data Integrity					
Non-recoverable Read Errors per Bits Read, Max	Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Power-On Hours per Year (24×7)	Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Workload Rate Limit (WRL)² 550 550 550 550 MTBF 1,500,000 hr	Non-recoverable Read Errors per Bits Read, Max	1 per 10E15				
MTBF	Power-On Hours per Year (24×7)	8,760	8,760	8,760	8,760	8,760
Warranty, Limited (years) 3 3 3 3 3 3 3 3 3	Workload Rate Limit (WRL) ²	550	550	550	550	550
Power Management Startup Current, Typical (12V, A) 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8	MTBF	1,500,000 hr				
Startup Current, Typical (12V, A) 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.8 1.2 1.2 <t< td=""><td>Warranty, Limited (years)³</td><td>3</td><td>3</td><td>3</td><td>3</td><td>3</td></t<>	Warranty, Limited (years) ³	3	3	3	3	3
Average Operating Power (W) 6.9 W 6.9 W 4.9 W 4.	Power Management					
Idling Average (W)	Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Standby Mode/Sleep Mode, Typical (W) 1.2/1.2 1.2/1.2 1.2/1.2 0.8/0.8 0.8/0.8 Voltage Tolerance (5 V) ±5% ±5% ±5% ±5% ±5% Voltage Tolerance (12 V) ±10% ±10% ±10% ±10% ±10% Environmental/Temperature Operating (ambient, min °C) 5 5 5 5 5 Operating (drive case, max °C) ⁴ 70 70 70 70 70 70 Non-operating (ambient, min °C) -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 <	Average Operating Power (W)	6.9 W	6.9 W	6.9 W	7.2 W	7.2 W
Voltage Tolerance (5 V) ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±5% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10% ±10%	Idling Average (W)	4.9 W				
Voltage Tolerance (12 V) ±10% ±10% ±10% ±10% ±10% Environmental/Temperature Operating (ambient, min °C) 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 70 7	Standby Mode/Sleep Mode, Typical (W)	1.2/1.2	1.2/1.2	1.2/1.2	0.8/0.8	0.8/0.8
Environmental/Temperature	Voltage Tolerance (5 V)	±5%	±5%	±5%	±5%	±5%
Operating (ambient, min °C) 5 5 5 5 Operating (drive case, max °C) ⁴ 70 70 70 70 70 Non-operating (ambient, min °C) -40 -40 -40 -40 -40 -40 Physical Height (mm/in, max) 26.11 mm/1.028 in 101.85 mm/4.01 in 101.85 mm/5.787 in 146.99 mm/5.787 in 146.99 mm/5.787 in 16 146.99 mm/5.787 in 146.99 mm/5.787 in 16 146.99 mm/5.787 in 16 690 g/1.521 lb 690 g/1.521 lb 690 g/1.521 lb 650 g/1.433 lb 650 g/1.4	Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%	±10%
Operating (drive case, max °C) ⁴ 70 70 70 70 70 Non-operating (ambient, min °C) -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 -40 <t< td=""><td>Environmental/Temperature</td><td></td><td></td><td></td><td></td><td></td></t<>	Environmental/Temperature					
Non-operating (ambient, min °C) Physical Height (mm/in, max) 26.11 mm/1.028 in 26	Operating (ambient, min °C)	5	5	5	5	5
Physical Height (mm/in, max) 26.11 mm/1.028 in 26.	Operating (drive case, max °C) ⁴	70	70	70	70	70
Height (mm/in, max) 26.11 mm/1.028 in Width (mm/in, max) 26.11 mm/1.028 in Depth (mm/in, max)	Non-operating (ambient, min °C)	-40	-40	-40	-40	-40
Width (mm/in, max) 101.85 mm/4.01 in Depth (mm/in, max) 101.85 mm/4.01 in log mm/5.787 in log mm/5.787 in log mm/5.787 in log mm/5.781 log mm/5.787 in log mm/5.781 log mm/5.787 in log mm/5.781 log mm/5.781 log mm/5.787 in log mm/5.781 log mm/5.787	Physical					
Depth (mm/in, max) 146.99 mm/5.787 in 146.99	Height (mm/in, max)	26.11 mm/1.028 in				
Depth (mm/in, max) in in in in Weight (lb/g) 690 g/1.521 lb 690 g/1.521 lb 690 g/1.521 lb 650 g/1.433 lb 650 g/1.433 lb Carton Unit Quantity 20 20 20 20 20	Width (mm/in, max)	101.85 mm/4.01 in				
Weight (lb/g) 690 g/1.521 lb 690 g/1.521 lb 690 g/1.521 lb 650 g/1.433 lb 650 g/1.433 lb Carton Unit Quantity 20 20 20 20	Depth (mm/in, max)					
Carton Unit Quantity 20 20 20 20	Weight (lb/g)	+				
		<u> </u>				
	Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8

^{1 32} Al streams = 16 Al 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.

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