



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure. Seagate Surveillance-Specialised Storage



SkyHawk[™] leverages Seagate's extensive experience in designing drives purpose-built for surveillance applications.



Best-Fit Applications

- Network video recorders (NVR)
- Embedded surveillance DVRs (SDVR)
- Hybrid surveillance DVRs
- Surveillance DVRs



Key Advantages

ImagePerfect[™] **firmware** is designed to ensure seamless video footage capture in 24×7 surveillance workloads¹ that record video from 64 HD cameras.

SkyHawk Health Management actively helps protect your surveillance storage by focusing on prevention, intervention, and recovery options.² RAID RapidRebuild[™] is the latest feature, which provides 3× faster volume rebuilds over traditional RAID rebuilds.

RV sensors built in allow drives to maintain performance in multi-bay systems, giving customers the flexibility to scale their systems when more storage is needed.

ATA streaming support enables recordings from up to 64 HD cameras for smooth, uninterrupted footage.

Up to 14 TB³ or over 9,345 hours⁴ of HD video storage support an increased number of HD cameras and allows longer data retention periods.

1 M hours MTBF, 5-year limited warranty3 represents an improved total cost of ownership (TCO) with reduced maintenance costs.

Lower power consumption means a reduction in heat emissions, which improves reliability in surveillance solutions. Tarnish-resistant components help protect drive from environmental elements, increasing field reliability.

1 SkyHawk surveillance drives are designed for always-on workloads of 180 TB/year. For higher transaction workloads, see Seagate's enterorise-class drive offerings.

- 2 Contact your Seagate sales representative for further information
- 3 14 TB, 12 TB, and 10 TB coming soon
- 4 Calculated based on H.264, 1M pixels, medium quality, 15FPS, 1 camera, and 24 hours of recording/day.
- 5 SkyHawk surveillance drives are designed to operate under ambient operating temperatures of 0°C to 60°C and normal environments. Usage of drives in higher temperatures or other extreme environmental conditions will reduce useful life.
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Specifications	14 TB	12 TB	10 TB	10 TB	8 TB	
Standard Model Numbers ^{1,2}	ST14000VX0008	ST12000VX0008	ST10000VX0008	ST10000VX0004	ST8000VX0022	
SkyHawk [™] Health Management Included	Yes	Yes	Yes	Yes	Yes	
Interface	SATA 6 Gb/s					
Features and Performance						
Drive Bays Supported	Up to 16					
Cameras Supported	Up to 64					
RV Sensors	Yes	Yes	Yes	Yes	Yes	
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	210MB/s	210MB/s	210MB/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	
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15					
Power-On Hours per Year (24×7)	8,760	8,760	8,760	8,760	8,760	
Workload Rate Limit (WRL) ³	180	180	180	180	180	
MTBF	1,000,000 hr					
Warranty, Limited (years) ⁴	3	3	3	3	3	
Power Management						
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	2	
Average Operating Power (W)	6.9 W	6.9 W	6.9 W	6.8 W	9 W	
Idling Average (W)	4.9 W	4.9 W	4.9 W	4.4 W	7.6 W	
Standby Mode/Sleep Mode, Typical (W)	1.2/1.2	1.2/1.2	1.2/1.2	0.8/0.8	0.6/0.6	
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) ⁵	70	70	70	70	70	
Non-operating (ambient, min °C)	-40	-40	-40	-40	-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 (lb/g)	690 g/1.521 lb	690 g/1.521 lb	690 g/1.521 lb	650 g/1.433 lb	780 g/1.72 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 14 TB, 12 TB, and 10 TB coming soon

2 Later 6 TB and 3 TB models are ST6000VX001 and ST3000VX009.

3 SkyHawk surveillance drives are designed for always-on workloads of 180 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.

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

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





Specifications	6 TB	6 TB	4 TB	3 TB	3 TB
Standard Model Numbers ^{1,2}	ST6000VX001	ST6000VX0023	ST4000VX007	ST3000VX009	ST3000VX010
SkyHawk [™] Health Management Included	Yes	Yes	Yes	_	_
Interface	SATA 6 Gb/s				
Features and Performance					
Drive Bays Supported	Up to 16	Up to 16	Up to 16	Up to 8	Up to 8
Cameras Supported	Up to 64				
RV Sensors	Yes	Yes	Yes	_	—
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	195MB/s	190MB/s	180MB/s	190MB/s
Cache (MB)	256	256	64	256	64
Reliability/Data Integrity					
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E15	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours per Year (24×7)	8,760	8,760	8,760	8,760	8,760
Workload Rate Limit (WRL) ³	180	180	180	180	180
MTBF	1,000,000 hr				
Warranty, Limited (years) ⁴	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	2	1.8	1.8	1.8
Average Operating Power (W)	5 W	9 W	5.5 W	3.5 W	5.6 W
Idling Average (W)	3.4 W	7.2 W	3.2 W	2.5 W	4 W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.6/0.6	0.25/0.25	0.25/0.25	0.5/0.5
Voltage Tolerance (5 V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%	±10%
Environmental/Temperature					
Operating (ambient, min °C)	0	5	0	0	0
Operating (drive case, max °C) ⁵	70	70	70	70	70
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	20.2 mm/0.795 in	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 (lb/g)	610 g/1.345 lb	705 g/1.55 lb	635 g/1.4 lb	490 g/1.08 lb	610 g/1.35 lb
Carton Unit Quantity	20	20	20	25	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8

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2 Later 6 TB and 3 TB models are ST6000VX001 and ST3000VX009.

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Specifications	2 TB	1 TB					
Standard Model Numbers ^{1,2}	ST2000VX008	ST1000VX005					
SkyHawk [™] Health Management Included	_	_					
Interface	SATA 6 Gb/s	SATA 6 Gb/s					
Features and Performance							
Drive Bays Supported	Up to 8	Up to 8					
Cameras Supported	Up to 64	Up to 64					
RV Sensors	_	-					
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s					
Cache (MB)	64	64					
Reliability/Data Integrity							
Tarnish Resistant	Yes	Yes					
Load/Unload Cycles	300,000	-					
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14					
Power-On Hours per Year (24×7)	8,760	8,760					
Workload Rate Limit (WRL) ³	180	180					
MTBF	1,000,000 hr	1,000,000 hr					
Warranty, Limited (years) ⁴	3	3					
Power Management							
Startup Current, Typical (12V, A)	1.8	1.8					
Average Operating Power (W)	5.6 W	5.6 W					
Idling Average (W)	4 W	4 W					
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.5/0.5					
Voltage Tolerance (5 V)	±5%	±5%					
Voltage Tolerance (12 V)	±10%	±10%					
Environmental/Temperature							
Operating (ambient, min °C)	0	0					
Operating (drive case, max °C) ⁵	70	70					
Non-operating (ambient, min °C)	-40	-40					
Physical							
Height (mm/in, max)	26.11 mm/1.028 in	20.2 mm/0.795 in					
Width (mm/in, max)	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					
Weight (lb/g)	610 g/1.345 lb	415 g/0.915 lb					
Carton Unit Quantity	20	25					
Cartons per Pallet / Cartons per Layer	40/8	40/8					

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