



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure. Seagate Surveillance-Specialised Storage

SkyHawk $^{\text{TM}}$ 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 workloads 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

NVR-ready design allows 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 10 TB or over 2,000 hours of HD video storage support an increased number of HD cameras and allows longer data retention periods.

1 M hours MTBF, 3-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, low transaction workloads (20% duty cycle) of 180 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.
- 2 Contact your Seagate sales representative for further information.
- 3 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.





Specifications	10TB	8TB	6ТВ	4TB	3ТВ
Standard Model Numbers	ST10000VX0004	ST8000VX0022	ST6000VX0003, ST6000VX0023	ST4000VX007	ST3000VX010
SkyHawk [™] Health Management Included ¹	Yes	Yes	Yes	Yes	_
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Features and Performance					
Drive Bays Supported	8+	8+	8+	8+	1 to 8
Cameras Supported	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	195MB/s	190MB/s	180MB/s
Cache (MB)	256	256	256	64	64
Reliability/Data Integrity					
Tarnish Resistant	Yes	Yes	Yes	Yes	No
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15	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) ²	180	180	180	180	180
MTBF	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr
Warranty, Limited (years) ³	3	3	3	3	3
Power Management		·			
Startup Current, Typical (12V, A)	1.8	2	2	1.8	1.8
Average Operating Power (W)	6.8 W	9 W	9 W	5.5 W	5.6 W
Idling Average (W)	4 W	8 W	7 W	3 W	4 W
Standby Mode/Sleep Mode, Typical (W)	0.8/0.8	0.6/0.6	0.6/0.6	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)	5	5	5	0	0
Operating (drive case, max °C) ⁴	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	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 (lb/g)	650 g/1.433 lb	780 g/1.72 lb	705 g/1.55 lb	635 g/1.4 lb	610 g/1.35 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 10} TB model available in early CY2018.

² SkyHawk surveillance drives are designed for always-on workloads of 180 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.

 $[\]ensuremath{\mathtt{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 products.





Specifications	2TB	1TB	
Standard Model Numbers	ST2000VX008	ST1000VX005	
SkyHawk [™] Health Management Included ¹	_	_	
Interface	SATA 6 Gb/s	SATA 6 Gb/s	
Features and Performance			
Drive Bays Supported	1 to 8	1 to 8	
Cameras Supported	Up to 64	Up to 64	
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s	
Cache (MB)	64	64	
Reliability/Data Integrity			
Tarnish Resistant	No	No	
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) ²	180	180	
MTBF	1,000,000 hr	1,000,000 hr	
Warranty, Limited (years) ³	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) ⁴	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/1.35 lb	415 g/0.915 lb	
Carton Unit Quantity	20	25	
Cartons per Pallet / Cartons per Layer	40/8	40/8	

^{1 10} TB model available in early CY2018.

² SkyHawk surveillance drives are designed for always-on workloads of 180 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 products.



AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000
ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888
EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

© 2017 Seagate Technology LLC. All rights reserved. Seagate, Seagate Technology and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. ImagePerfect, SkyHawk and the SkyHawk logo are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Quantitative usage examples for various applications are for illustrative purposes. Actual quantities will vary based on various factors, including file size, file format, features and application software. Actual data rates may vary depending on operating environment and other factors, such as chosen interface and disk capacity. Seagate reserves the right to change, without notice, product offerings or specifications. DS1902.6-1710GB October 2017