



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure. Surveillance-Specialized Storage

SkyHawk $^{\text{TM}}$ leverages Seagate's extensive experience in designing drives purpose-built for surveillance applications.





Best-Fit Applications

- Network video recorders (NVR)
- 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. Included is RAID RapidRebuild, which provides $3 \times$ 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.

1M 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.

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

² Contact your Seagate sales representative for further information.

³ Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the products.





Specifications	8TB	8TB	6ТВ	6ТВ	4TB
Standard Model Numbers ¹	ST8000VX004	ST8000VX0022	ST6000VX001	ST6000VX0023	ST4000VX007
SkyHawk [™] Health Management Included	Yes	Yes	Yes	Yes	Yes
Interface	SATA 6Gb/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	180MB/s	195MB/s	190MB/s
Cache (MB)	256	256	256	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
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E14	1 per 10E15	1 per 10E14
Power-On Hours per Year (24×7)	8760	8760	8760	8760	8760
Workload Rate Limit (WRL) ²	180	180	180	180	180
MTBF	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
Warranty, Limited (years) ³	3	3	3	3	3
Power Management					
Startup Current, Typical (12V, A)	1.8	2.0	1.8	2	1.8
Average Operating Power (W)	8.73W	9.0W	5W	9W	5.5W
Idle Average (W)	7.06W	7.6W	3.4W	7.2W	3.2W
Standby Mode/Sleep Mode, Typical (W)	0.96/0.96	0.6/0.6	0.25/0.25	0.6/0.6	0.25/0.25
Voltage Tolerance (5V)	+10/-5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%	±10%	±10%	±10%
Environmental/Temperature					
Operating (ambient, min °C)	5	5	0	5	0
Operating (drive case, max °C) ⁴	70	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40	-40
Physical					
Height (mm/in, max)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	716g/1.579lb	780g/1.72lb	610g/1.345lb	705g/1.55lb	635g/1.40lb
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 Later 6TB and 3TB models are ST6000VX001 and ST3000VX009.

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





Specifications	3ТВ	3ТВ	2TB	1TB
Standard Model Numbers ¹	ST3000VX009	ST3000VX010	ST2000VX008	ST1000VX005
SkyHawk [™] Health Management Included	_	_	_	_
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance	•			
Drive Bays Supported	Up to 8	Up to 8	Up to 8	Up to 8
Cameras Supported	Up to 64	Up to 64	Up to 64	Up to 64
RV Sensors	_	_	_	_
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	190MB/s	180MB/s	180MB/s
Cache (MB)	256	64	64	64
Reliability/Data Integrity				
Tarnish Resistant	Yes	Yes	Yes	Yes
Load/Unload Cycles	300,000	300,000	300,000	_
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours per Year (24×7)	8760	8760	8760	8760
Workload Rate Limit (WRL) ²	180	180	180	180
MTBF	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
Warranty, Limited (years) ³	3	3	3	3
Power Management				
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8
Average Operating Power (W)	3.5W	5.6W	5.6W	5.6W
Idle Average (W)	2.5W	4.0W	4.0W	4.0W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.5/0.5	0.5/0.5	0.5/0.5
Voltage Tolerance (5V)	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%	±10%	±10%
Environmental/Temperature				
Operating (ambient, min °C)	0	0	0	0
Operating (drive case, max °C) ⁴	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40
Physical				
Height (mm/in, max)	20.20mm/0.795in	26.11mm/1.028in	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	490g/1.08lb	490g/1.08lb	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	25	20	20	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8

¹ Later 6TB and 3TB models are ST6000VX001 and ST3000VX009.

² SkyHawk surveillance drives are designed for always-on workloads of 180TB/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. 90 Woodlands Avenue 7, Singapore 737911, 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

© 2019 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. DS1902.12-1906US June 2019