SKYHAWK SURVEILLANCE

SEAGATE

3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure.
Seagate Surveillance-Specialized 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

SKYHAWK HEALTH

Key Advantages

ImagePerfect™ firmware is designed to ensure seamless video footage capture in 24×7 surveillance workloads[1] 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 14TB[3] or over 9345 hours[4] of HD video storage support an increased number of HD cameras and allows longer data retention periods.

1M hours MTBF, 3-year limited warranty[5] 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 180TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.

2 Contact your Seagate sales representative for further information.

3 14TB, 12TB, and 10TB 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.

SKYHAWK SURVEILLANCE



Specifications	14TB	12TB	10TB	10TB	8TB
Standard Model Numbers[1,2]	ST14000VX0008	ST12000VX0008	ST10000VX0008	ST10000VX0004	ST8000VX0022
SkyHawk™ Health Management Included	Yes	Yes	Yes	Yes	Yes
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance					
Drive Bays Supported	Up to 16	Up to 16	Up to 16	Up to 16	Up to 16
Cameras Supported	Up to 64	Up to 64	Up to 64	Up to 64	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
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	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	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
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)	6.9W	6.9W	6.9W	6.8W	9W
Idle Average (W)	4.9W	4.9W	4.9W	4.4W	7.6W
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 (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±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
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/4.01in	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)	690g/1.521lb	690g/1.521lb	690g/1.521lb	650g/1.433lb	780g/1.72lb
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 14TB, 12TB, and 10TB coming soon

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

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

SKYHAWK SURVEILLANCE



Specifications	6TB	6TB	4TB	3TB	3TB
Standard Model Numbers[1,2]	ST6000VX001	ST6000VX0023	ST4000VX007	ST3000VX009	ST3000VX010
SkyHawk™ Health Management Included	Yes	Yes	Yes	—	—
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/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	Up to 64	Up to 64	Up to 64	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
Nonrecoverable 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	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
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)	5W	9W	5.5W	3.5W	5.6W
Idle Average (W)	3.4W	7.2W	3.2W	2.5W	4W
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 (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±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
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	20.2mm/0.795in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in	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)	610g/1.345lb	705g/1.55lb	635g/1.4lb	490g/1.08lb	610g/1.35lb
Carton Unit Quantity	20	20	20	25	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

1 14TB, 12TB, and 10TB coming soon

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

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

SKYHAWK SURVEILLANCE



Specifications	2TB	1TB
Standard Model Numbers[1,2]	ST2000VX008	ST1000VX005
SkyHawk™ Health Management Included	—	—
Interface	SATA 6Gb/s	SATA 6Gb/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	—
Nonrecoverable 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	1,000,000hr	1,000,000hr
Warranty, Limited (years)[4]	3	3
Power Management		
Startup Current, Typical (12V, A)	1.8	1.8
Average Operating Power (W)	5.6W	5.6W
Idle Average (W)	4W	4W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.5/0.5
Voltage Tolerance (5V)	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%
Environmental/Temperature		
Operating (ambient, min °C)	0	0
Operating (drive case, max °C)[5]	70	70
Nonoperating (ambient, min °C)	-40	-40
Physical		
Height (mm/in, max)	26.11mm/1.028in	20.2mm/0.795in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	20	25
Cartons per Pallet/Cartons per Layer	40/8	40/8

1 14TB, 12TB, and 10TB coming soon

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

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

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

© 2018 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. DS1902.10-1810US October 2018