



3.5 HDD DATA SHEET

Smart. Safe. Secure. Seagate Surveillance-Optimized Storage

Only Seagate has been making drives specifically for surveillance storage for ten years. SkyHawk™ is built to keep systems in the field longer and reduce the need for post-deployment support.





Best-Fit Applications

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

Key Advantages

ImagePerfect™ firmware supports 24×7 surveillance-optimized workloads tuned to record ~90% of the time and play back video footage the remaining 10%, and supports more cameras recording at higher resolutions than traditional drives.

Workload rating of 180TB/year allows SkyHawk to perform reliably in write-intensive surveillance systems—3× the workload rating of a desktop-class drive.¹

NVR-ready design allows drives to maintain performance in RAID and multi-drive systems, giving customers the flexibility to grow with the booming NVR market and scale their systems when more storage is needed.

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

Up to 10TB or over 2000 hours of HD video storage supports an increased number of cameras and helps to ensure longer data retention periods are met.

1M hours MTBF, 3-year limited warranty 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.²

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 Tarnish-resistant components are offered standard on capacities of 4TB or greater.





Specifications	10TB1	8TB ¹	6TB ¹	4TB¹	3TB1	2TB¹	1TB¹
Standard Model Numbers	ST10000VX0004	ST8000VX0022	ST6000VX0023	ST4000VX007	ST3000VX010	ST2000VX008	ST1000VX005
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Features and Performance							
Drive Bays Supported	8+	8+	8+	8+	1 to 8	1 to 8	1 to 8
Cameras Supported	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64
Max Sustained Transfer Rate OD (MB/s)	210	210	195	190	180	180	180
Cache (MB)	256	256	256	64	64	64	64
Reliability/Data Integrity							
Tarnish Resistant	Yes	Yes	Yes	Yes	No	No	No
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000	300,000	_
Nonrecoverable Read Errors Rate, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours per year	8760	8760	8760	8760	8760	8760	8760
Workload Rate Limit (WRL) ²	180	180	180	180	180	180	180
Mean Time Between Failures (MTBF) (hours)	1M	1M	1M	1M	1M	1M	1M
Warranty, Limited (years)	3	3	3	3	3	3	3
Power Management							
Startup Current, Typical (12V, A)	1.8	2.0	2.0	1.8	1.8	1.8	1.8
Average Operating Power (W)	6.8	9	9	5.5	5.6	5.6	5.6
Idle Average (W)	4.42	7.6	7.2	3.2	4	4	4
Standby Mode/Sleep Mode, Typical (W)	0.8/0.8	0.6/0.6	0.6/.06	0.25/0.25	0.5/0.5	0.5/0.5	0.5/0.5
Voltage Tolerance (5V)	±5%	±5%	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%	±10%	±10%	±10%	±10%	±10%
Environmental/Temperature							
Operating (ambient, min °C)	5	5	5	0	0	0	0
Operating (drive case, max °C)3	70	70	70	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40	-40	-40	-40
Physical							
Height (mm/in, max)	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	20.20/0.795
Width (mm/in, max)	101.85/4.01	101.85/4.01	101.85/4.01	101.85/4.01	101.85/4.01	101.85/4.01	101.85/4.01
Depth (mm/in, max)	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb, typical)	650/1.433	780/1.72	705/1.55	635/1.40	610/1.35	610/1.35	415/0.915
Carton Unit Quantity	20	20	20	20	20	20	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8	40/8	40/8

¹ One gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.

seagate.com



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

© 2016 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. ImagePerfect and SkyHawk 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. The export or re-export of Seagate hardware or software is regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit www.bis.doc.gov), and may be controlled for export, import and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS1902.3-1608US, August 2016

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

³ Seagate does not recommend operating at sustained case temperatures above 60°C. Operating at higher temperatures will reduce useful life of the product.