



# SKYHAWK

SURVEILLANCE



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 24x7 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—3x the workload rating of a desktop-class drive.<sup>1</sup>

**Rotational vibration (RV) sensors** allow 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.<sup>2</sup>

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

**Up to 10TB or 10,000 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.<sup>2</sup>

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

<sup>2</sup> Rotational vibration sensors and tarnish-resistant components are offered standard on capacities of 4TB or greater.



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Specifications	10TB <sup>1</sup>	8TB <sup>1</sup>	6TB <sup>1</sup>	4TB <sup>1</sup>	3TB <sup>1</sup>	2TB <sup>1</sup>	1TB <sup>1</sup>
Standard Model Numbers	ST10000VX0004	ST8000VX0022 <sup>2</sup>	ST6000VX0023 <sup>2</sup>	ST4000VX007 <sup>2</sup>	ST3000VX010 <sup>2</sup>	ST2000VX008 <sup>2</sup>	ST1000VX005 <sup>2</sup>
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
<b>Features and Performance</b>							
Drive Bays Supported	8+	8+	8+	8+	1 to 8	1 to 8	1 to 8
R/V (Rotational Vibration) Sensor	Yes	Yes	Yes	Yes	No	No	No
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
<b>Reliability/Data Integrity</b>							
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) <sup>3</sup>	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
<b>Power Management</b>							
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	0.6/0.6	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%
<b>Environmental/Temperature</b>							
Operating (ambient, min °C)	5	5	5	0	0	0	0
Operating (drive case, max °C) <sup>4</sup>	70	70	70	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40	-40	-40	-40
<b>Physical</b>							
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.

2 Coming Fall 2016. For immediate needs, please see Seagate Surveillance HDD.

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

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

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