



# 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>

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



# SKYHAWK

SURVEILLANCE



| 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     | 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       |
| <b>Features and Performance</b>             |                   |                  |                  |                  |                  |                  |                  |
| 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               |
| <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>2</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>3</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             |

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

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

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

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