



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure. Seagate Surveillance-Specialised Storage

SkyHawk $^{\text{TM}}$  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



## Key Advantages

ImagePerfect<sup>™</sup> firmware is designed to ensure seamless video footage capture in 24×7 surveillance workloads that record video from 64 HD cameras.

**SkyHawk Health Management** actively helps protect your surveillance storage by focusing on prevention, intervention, and recovery options.<sup>2</sup>

**NVR-ready design** allows 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 14 TB or over 9,345 hours**<sup>3</sup> **of HD video storage** support an increased number of HD cameras and allows longer data retention periods.

1 M hours MTBF, 4-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.

- 1 SkyHawk surveillance drives are designed for always-on workloads of 180 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.
- 2 Contact your Seagate sales representative for further information.
- 3 Calculated based on H.264, 1M pixels, medium quality, 15FPS, 1 camera, and 24 hours of recording/day.
- 4 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.





Specifications	14TB	12TB	10 TB	8 TB	6 TB		
Standard Model Numbers <sup>1</sup>	ST14000VX0008	ST12000VX0008	ST10000VX0008	ST8000VX0022	ST6000VX001		
SkyHawk <sup>™</sup> Health Management Included	Yes	Yes	Yes	Yes	Yes		
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6Gb/s	SATA 6Gb/s		
Features and Performance							
Drive Bays Supported	8+	8+	8+	8+	8+		
Cameras Supported	Up to 64						
Max. Sustained Transfer Rate OD (MB/s)	220MB/s	220MB/s	210MB/s	210MB/s	180MB/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		
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15						
Power-On Hours per Year (24×7)	8,760	8,760	8,760	8,760	8,760		
Workload Rate Limit (WRL) <sup>2</sup>	180	180	180	180	180		
MTBF	1,000,000 hr						
Warranty, Limited (years) <sup>3</sup>	3	3	3	3	3		
Power Management							
Startup Current, Typical (12V, A)	1.8	1.8	1.8	2	1.8		
Average Operating Power (W)	6.9 W	6.9 W	6.9 W	9 W	5 W		
Idling Average (W)	4.9 W	4.9 W	4.9 W	7.6 W	3.4 W		
Standby Mode/Sleep Mode, Typical (W)	0.8/0.8	0.8/0.8	0.8/0.8	0.6/0.6	0.25/0.25		
Voltage Tolerance (5 V)	±5%	±5%	±5%	±5%	±5%		
Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%	±10%		
Environmental/Temperature							
Operating (ambient, min °C)	5	5	5	5	0		
Operating (drive case, max °C) <sup>4</sup>	70	70	70	70	70		
Non-operating (ambient, min °C)	-40	-40	-40	-40	-40		
Physical							
Height (mm/in, max)	26.11 mm/1.028 in						
Width (mm/in, max)	101.85 mm/4.01 in						
Depth (mm/in, max)	146.99 mm/5.787 in						
Weight (lb/g)	690 g/1.521 lb	690 g/1.521 lb	690 g/1.521 lb	780 g/1.72 lb	610 g/1.345 lb		
Carton Unit Quantity	20	20	20	20	20		
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8		

<sup>1</sup> Later 6 TB and 3 TB models are ST6000VX001 and ST3000VX009.

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

 $<sup>\</sup>ensuremath{\mathtt{3}}$  Extended warranty options available. Consult your distributor for details.

<sup>4</sup> Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the products.





Specifications	6 TB	4 TB	3 TB	3 TB	2 TB		
Standard Model Numbers <sup>1</sup>	ST6000VX0023	ST4000VX007	ST3000VX009	ST3000VX010	ST2000VX008		
SkyHawk <sup>™</sup> Health Management Included	Yes	Yes	_	_	_		
Interface	SATA 6Gb/s						
Features and Performance							
Drive Bays Supported	8+	8+	1 to 8	1 to 8	1 to 8		
Cameras Supported	Up to 64						
Max. Sustained Transfer Rate OD (MB/s)	195MB/s	190MB/s	180MB/s	190MB/s	180MB/s		
Cache (MB)	256	64	256	64	64		
Reliability/Data Integrity							
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes		
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000		
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E14	1 per 10E15	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) <sup>2</sup>	180	180	180	180	180		
MTBF	1,000,000 hr						
Warranty, Limited (years) <sup>3</sup>	3	3	3	3	3		
Power Management							
Startup Current, Typical (12V, A)	2	1.8	1.8	1.8	1.8		
Average Operating Power (W)	9 W	5.5 W	3.5 W	5.6 W	5.6 W		
Idling Average (W)	7.2 W	3.2 W	2.5 W	4 W	4 W		
Standby Mode/Sleep Mode, Typical (W)	0.6/0.6	0.25/0.25	0.25/0.25	0.5/0.5	0.5/0.5		
Voltage Tolerance (5 V)	±5%	±5%	±5%	±5%	±5%		
Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%	±10%		
Environmental/Temperature							
Operating (ambient, min °C)	5	0	0	0	0		
Operating (drive case, max °C) <sup>4</sup>	70	70	70	70	70		
Non-operating (ambient, min °C)	-40	-40	-40	-40	-40		
Physical							
Height (mm/in, max)	26.11 mm/1.028 in	26.11 mm/1.028 in	20.2 mm/0.795 in	26.11 mm/1.028 in	26.11 mm/1.028 in		
Width (mm/in, max)	101.85 mm/4.01 in						
Depth (mm/in, max)	146.99 mm/5.787 in						
Weight (lb/g)	705 g/1.55 lb	635 g/1.4 lb	490 g/1.08 lb	610 g/1.35 lb	610 g/1.345 lb		
Carton Unit Quantity	20	20	25	20	20		
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8		

<sup>1</sup> Later 6 TB and 3 TB models are ST6000VX001 and ST3000VX009.

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

 $<sup>\</sup>ensuremath{\mathtt{3}}$  Extended warranty options available. Consult your distributor for details.

<sup>4</sup> Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the products.





Specifications	1 TB				
Standard Model Numbers	ST1000VX005				
SkyHawk <sup>™</sup> Health Management Included	_				
Interface	SATA 6Gb/s				
Features and Performance					
Drive Bays Supported	1 to 8				
Cameras Supported	Up to 64				
Max. Sustained Transfer Rate OD (MB/s)	180MB/s				
Cache (MB)	64				
Reliability/Data Integrity					
Tarnish Resistant	Yes				
Load/Unload Cycles	_				
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14				
Power-On Hours per Year (24×7)	8,760				
Workload Rate Limit (WRL) <sup>2</sup>	180				
MTBF	1,000,000 hr				
Warranty, Limited (years) <sup>3</sup>	3				
Power Management					
Startup Current, Typical (12V, A)	1.8				
Average Operating Power (W)	5.6 W				
Idling Average (W)	4 W				
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5				
Voltage Tolerance (5 V)	±5%				
Voltage Tolerance (12 V)	±10%				
Environmental/Temperature					
Operating (ambient, min °C)	0				
Operating (drive case, max °C) <sup>4</sup>	70				
Non-operating (ambient, min °C)	-40				
Physical					
Height (mm/in, max)	20.2 mm/0.795 in				
Width (mm/in, max)	101.85 mm/4.01 in				
Depth (mm/in, max)	146.99 mm/5.787 in				
Weight (lb/g)	415 g/0.915 lb				
Carton Unit Quantity	25				
Cartons per Pallet / Cartons per Layer	40/8				

- 1 Later 6 TB and 3 TB models are ST6000VX001 and ST3000VX009.
- 2 SkyHawk surveillance drives are designed for always-on workloads of 180 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.
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