



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure. Surveillance-Specialised Storage

SkyHawk<sup>™</sup> leverages Seagate's extensive experience in designing drives purpose-built for surveillance applications.



## Parties Par

## **Best-Fit Applications**

- Network video recorders (NVR)
- Video DVRs





## **Key Advantages**

ImagePerfect<sup>™</sup> firmware is designed to ensure seamless video footage capture in 24×7 surveillance workloads¹ 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> Included is RAID RapidRebuild<sup>™</sup>, which provides 3× faster volume rebuilds over traditional RAID rebuilds.

**Unparalleled data protection**with included 3-year Rescue Data Recovery Services plan, helping protect important video data with Seagate's in-house data recovery services.

**RV** sensors builtin 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.

**1 M hours MTBF, 3-year limited warranty**<sup>3</sup> 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 video drives are designed for always-on workloads of 180TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.
- 2 Contact your Seagatesales representative for further information.
- 3 Seagatedoes not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce the useful life of the products.





Specifications	8 TB	8 TB	6TB	6 TB
Standard Model Numbers	ST8000VX010	ST8000VX004	ST6000VX009	ST6000VX001
SkyHawk <sup>™</sup> Health Management Included	Yes	Yes	Yes	Yes
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Recording Technology	CMR	CMR	CMR	CMR
Drive Design	Air	Air	Air	Air
Features and Performance				
Drive Bays Supported	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
RV Sensors	Yes	_	Yes	_
Max Sustained Transfer Rate OD (MB/s)	180MB/s	210MB/s	180MB/s	180MB/s
Cache (MB)	256	256	256	256
Reliability/Data Integrity				
Tarnish Resistant	Yes	Yes	Yes	Yes
Load/Unload Cycles	600,000	600,000	600,000	600,000
Non-recoverable Read Errors Rate, Max	1 per 10E14	1 per 10E15	1 per 10E14	1 per 10E14
Power-On Hours per year	8,760	8,760	8,760	8,760
Workload Rate Limit (WRL)	180	180	180	180
Mean Time Between Failures (MTBF) (hours)	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr
Warranty, Limited (years) <sup>2</sup>	3	3	3	3
Rescue Data Recovery Services (years) <sup>3</sup>	3	3	3	3
Power Management				
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8
Average Operating Power (W)	5.3 W	8.73 W	5.3 W	5 W
Idling Average (W)	3.4 W	7.06 W	3.4 W	3.4 W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.96/0.96	0.25/0.25	0.25/0.25
Voltage Tolerance (5 V)	±5%	+10/-5%	±5%	±5%
Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%
Environmental/Temperature				
Operating (ambient, min °C)	0	5	0	0
Operating (drive reported, max °C) <sup>4</sup>	65	70	65	70
Non-operating (ambient, min °C)	-40	-40	-40	-40
Physical				
Height (mm/in, max)	26.1 mm/1.028 in	26.11 mm/1.028 in	26.1 mm/1.028 in	26.11 mm/1.028 in
Width (mm/in, max)	101.6 mm/4 in	101.85 mm/4.01 in	101.6 mm/4 in	101.85 mm/4.01 in
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in
Weight (g/lb, typical)	630 g/1.389 lb	716 g/1.579 lb	630 g/1.389 lb	610 g/1.345 lb
Carton Unit Quantity	20	20	20	20
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8

<sup>1</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.

 $<sup>2\ \</sup>mbox{Extended}$  warranty options available. Consult your distributor for details.

<sup>3</sup> From May 1, 2020, 3-year Rescue Data Recovery Services plan may be offered in addition to standard warranty. This is offered for selected regions only. Check with reseller on availability.

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





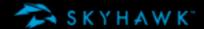
Specifications	4 TB	4 TB	3ТВ	3 TB
Standard Model Numbers	ST4000VX016	ST4000VX013	ST3000VX015	ST3000VX009
SkyHawk <sup>™</sup> Health Management Included	Yes	Yes	Yes	_
Interface	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s	SATA 6 Gb/s
Recording Technology	CMR	SMR	CMR	CMR
Drive Design	Air	Air	Air	Air
Features and Performance				
Drive Bays Supported	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
RV Sensors	Yes	_	_	_
Max Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s	180MB/s	180MB/s
Cache (MB)	256	256	256	256
Reliability/Data Integrity				
Tarnish Resistant	Yes	Yes	Yes	Yes
Load/Unload Cycles	600,000	600,000	600,000	600,000
Non-recoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours per year	8,760	8,760	8,760	8,760
Workload Rate Limit (WRL) <sup>1</sup>	180	180	180	180
Mean Time Between Failures (MTBF) (hours)	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr
Warranty, Limited (years) <sup>2</sup>	3	3	3	3
Rescue Data Recovery Services (years) <sup>3</sup>	3	3	3	3
Power Management				
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8
Average Operating Power (W)	3.7 W	3.7 W	3.7 W	3.5 W
Idling Average (W)	2.5 W	2.5 W	2.5 W	2.5 W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.25/0.25	0.25/0.25	0.25/0.25
Voltage Tolerance (5 V)	±5%	±5%	±5%	±5%
Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%
Environmental/Temperature				
Operating (ambient, min °C)	0	0	0	0
Operating (drive reported, max °C) <sup>4</sup>	65	70	65	70
Non-operating (ambient, min °C)	-40	-40	-40	-40
Physical				
Height (mm/in, max)	20.2 mm/0.795 in	20.2 mm/0.795 in	20.2 mm/0.795 in	20.2 mm/0.795 in
Width (mm/in, max)	101.6 mm/4 in	101.85 mm/4.01 in	101.6 mm/4 in	101.85 mm/4.01 in
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in
Weight (g/lb, typical)	630 g/1.389 lb	490 g/1.08 lb	630 g/1.389 lb	490 g/1.08 lb
Carton Unit Quantity	25	25	25	25
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8

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Specifications	2TB	2 TB	2 TB	1 TB	1TB			
Standard Model Numbers	ST2000VX017	ST2000VX015	ST2000VX008	ST1000VX013	ST1000VX005			
SkyHawk <sup>™</sup> Health Management Included	Yes	_	_	Yes	_			
Interface	SATA 6 Gb/s							
Recording Technology	CMR	SMR	CMR	CMR	CMR			
Drive Design	Air	Air	Air	Air	Air			
Features and Performance								
Drive Bays Supported	Up to 8							
Cameras Supported	Up to 64							
RV Sensors	_	_	_	_	_			
Max Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s	180MB/s	180MB/s	180MB/s			
Cache (MB)	256	256	64	256	64			
Reliability/Data Integrity								
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes			
Load/Unload Cycles	600,000	600,000	300,000	600,000	_			
Non-recoverable Read Errors Rate, Max	1 per 10E14							
Power-On Hours per year	8,760	8,760	8,760	8,760	8,760			
Workload Rate Limit (WRL)	180	180	180	180	180			
Mean Time Between Failures (MTBF) (hours)	1,000,000 hr							
Warranty, Limited (years) <sup>2</sup>	3	3	3	3	3			
Rescue Data Recovery Services (years) <sup>3</sup>	3	3	3	_	_			
Power Management								
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8			
Average Operating Power (W)	3.7 W	3.7 W	5.6 W	3.7 W	5.6 W			
Idling Average (W)	2.5 W	2.5 W	4 W	2.5 W	4 W			
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.25/0.25	0.5/0.5	0.25/0.25	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)	0	0	0	0	0			
Operating (drive reported, max °C) <sup>4</sup>	65	70	70	65	70			
Non-operating (ambient, min °C)	-40	-40	-40	-40	-40			
Physical								
Height (mm/in, max)	20.2 mm/0.795 in	20.2 mm/0.795 in	26.11 mm/1.028 in	20.2 mm/0.795 in	20.2 mm/0.795 in			
Width (mm/in, max)	101.6 mm/4 in	101.85 mm/4.01 in	101.85 mm/4.01 in	101.6 mm/4 in	101.85 mm/4.01 in			
Depth (mm/in, max)	146.99 mm/5.787 in							
Weight (g/lb, typical)	415 g/0.915 lb	415 g/0.915 lb	610 g/1.345 lb	415 g/0.915 lb	415 g/0.915 lb			
Carton Unit Quantity	25	25	20	25	25			
Cartons per Pallet / Cartons per Layer	40/8	40/8	40/8	40/8	40/8			

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