



# SKYHAWK

SURVEILLANCE



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure.  
Seagate Surveillance-Specialized Storage



SkyHawk™ 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



# SKYHAWK

HEALTH

## Key Advantages

**ImagePerfect™ firmware** is designed to ensure seamless video footage capture in 24x7 surveillance workloads<sup>1</sup> 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> RAID RapidRebuild™ is the latest feature, which provides 3x faster volume rebuilds over traditional RAID rebuilds.

**RV sensors built in** 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.

**Up to 14TB<sup>3</sup> or over 9345 hours<sup>4</sup> of HD video storage** support an increased number of HD cameras and allows longer data retention periods.

**1M hours MTBF, 3-year limited warranty<sup>5</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.

<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> Contact your Seagate sales representative for further information.

<sup>3</sup> 14TB, 12TB, and 10TB coming soon

<sup>4</sup> Calculated based on H.264, 1M pixels, medium quality, 15FPS, 1 camera, and 24 hours of recording/day.

<sup>5</sup> 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	10TB	10TB	8TB
Standard Model Numbers <sup>1,2</sup>	ST14000VX0008	ST12000VX0008	ST10000VX0008	ST10000VX0004	ST8000VX0022
SkyHawk™ Health Management Included	Yes	Yes	Yes	Yes	Yes
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
<b>Features and Performance</b>					
Drive Bays Supported	Up to 16	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	Up to 64
RV Sensors	Yes	Yes	Yes	Yes	Yes
Max. Sustained Transfer Rate OD (MB/s)	210MB/s	210MB/s	210MB/s	210MB/s	210MB/s
Cache (MB)	256	256	256	256	256
<b>Reliability/Data Integrity</b>					
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15	1 per 10E15
Power-On Hours per Year (24x7)	8760	8760	8760	8760	8760
Workload Rate Limit (WRL) <sup>3</sup>	180	180	180	180	180
MTBF	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
Warranty, Limited (years) <sup>4</sup>	3	3	3	3	3
<b>Power Management</b>					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	2
Average Operating Power (W)	6.9W	6.9W	6.9W	6.8W	9W
Idle Average (W)	4.9W	4.9W	4.9W	4.4W	7.6W
Standby Mode/Sleep Mode, Typical (W)	1.2/1.2	1.2/1.2	1.2/1.2	0.8/0.8	0.6/0.6
Voltage Tolerance (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%	±10%	±10%	±10%
<b>Environmental/Temperature</b>					
Operating (ambient, min °C)	5	5	5	5	5
Operating (drive case, max °C) <sup>5</sup>	70	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40	-40
<b>Physical</b>					
Height (mm/in, max)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	690g/1.521lb	690g/1.521lb	690g/1.521lb	650g/1.433lb	780g/1.72lb
Carton Unit Quantity	20	20	20	20	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

1 14TB, 12TB, and 10TB coming soon

2 Later 6TB and 3TB models are ST6000VX001 and ST3000VX009.

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

4 Extended warranty options available. Consult your distributor for details.

5 Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the products.



Specifications	6TB	6TB	4TB	3TB	3TB
Standard Model Numbers <sup>1,2</sup>	ST6000VX001	ST6000VX0023	ST4000VX007	ST3000VX009	ST3000VX010
SkyHawk™ Health Management Included	Yes	Yes	Yes	—	—
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
<b>Features and Performance</b>					
Drive Bays Supported	Up to 16	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	Up to 64
RV Sensors	Yes	Yes	Yes	—	—
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	195MB/s	190MB/s	180MB/s	190MB/s
Cache (MB)	256	256	64	256	64
<b>Reliability/Data Integrity</b>					
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E15	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours per Year (24x7)	8760	8760	8760	8760	8760
Workload Rate Limit (WRL) <sup>3</sup>	180	180	180	180	180
MTBF	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
Warranty, Limited (years) <sup>4</sup>	3	3	3	3	3
<b>Power Management</b>					
Startup Current, Typical (12V, A)	1.8	2	1.8	1.8	1.8
Average Operating Power (W)	5W	9W	5.5W	3.5W	5.6W
Idle Average (W)	3.4W	7.2W	3.2W	2.5W	4.0W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.6/0.6	0.25/0.25	0.25/0.25	0.5/0.5
Voltage Tolerance (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%	±10%	±10%	±10%
<b>Environmental/Temperature</b>					
Operating (ambient, min °C)	0	5	0	0	0
Operating (drive case, max °C) <sup>5</sup>	70	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40	-40
<b>Physical</b>					
Height (mm/in, max)	26.11mm/1.028in	26.11mm/1.028in	26.11mm/1.028in	20.20mm/0.795in	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	610g/1.345lb	705g/1.55lb	635g/1.40lb	490g/1.08lb	610g/1.35lb
Carton Unit Quantity	20	20	20	25	20
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

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Specifications	2TB	1TB
Standard Model Numbers <sup>1,2</sup>	ST2000VX008	ST1000VX005
SkyHawk™ Health Management Included	—	—
Interface	SATA 6Gb/s	SATA 6Gb/s
<b>Features and Performance</b>		
Drive Bays Supported	Up to 8	Up to 8
Cameras Supported	Up to 64	Up to 64
RV Sensors	—	—
Max. Sustained Transfer Rate OD (MB/s)	180MB/s	180MB/s
Cache (MB)	64	64
<b>Reliability/Data Integrity</b>		
Tarnish Resistant	Yes	Yes
Load/Unload Cycles	300,000	—
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14
Power-On Hours per Year (24x7)	8760	8760
Workload Rate Limit (WRL) <sup>3</sup>	180	180
MTBF	1,000,000hr	1,000,000hr
Warranty, Limited (years) <sup>4</sup>	3	3
<b>Power Management</b>		
Startup Current, Typical (12V, A)	1.8	1.8
Average Operating Power (W)	5.6W	5.6W
Idle Average (W)	4.0W	4.0W
Standby Mode/Sleep Mode, Typical (W)	0.5/0.5	0.5/0.5
Voltage Tolerance (5V)	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%
<b>Environmental/Temperature</b>		
Operating (ambient, min °C)	0	0
Operating (drive case, max °C) <sup>5</sup>	70	70
Nonoperating (ambient, min °C)	-40	-40
<b>Physical</b>		
Height (mm/in, max)	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.01in	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in	146.99mm/5.787in
Weight (g/lb)	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	20	25
Cartons per Pallet/Cartons per Layer	40/8	40/8

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