



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure.  
Surveillance-Specialized Storage



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



### Best-Fit Applications

- Network video recorders (NVR)
- 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> Included is RAID RapidRebuild™, 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.

**1M 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.

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



Specifications	8TB	8TB	6TB	6TB	4TB
Standard Model Numbers	ST8000VX004	ST8000VX002	ST6000VX011	ST6000VX001	ST4000VX005
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
Recording Technology	CMR	SMR	SMR	CMR	SMR
Drive Design	Air	Air	Air	Air	Air
<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 <sup>1</sup>	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	180MB/s	180MB/s	180MB/s	180MB/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	600,000	600,000	600,000	600,000
Nonrecoverable Read Errors Rate, Max	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
Workload Rate Limit (WRL) <sup>2</sup>	180	180	180	180	180
Mean Time Between Failures (MTBF) (hours)	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
Warranty, Limited (years) <sup>3</sup>	3	3	3	3	3
<b>Power Management</b>					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power (W)	8.73W	5.3W	5.3W	5.0W	3.7W
Idle Average (W)	7.06W	3.4W	3.4W	3.4W	2.5W
Standby Mode/Sleep Mode, Typical (W)	0.96/0.96	0.25/0.25	0.25/0.25	0.25/0.25	0.25/0.25
Voltage Tolerance (5V)	+10/-5%	±5%	±5%	±5%	±5%
Voltage Tolerance (12V)	±10%	±10%	±10%	±10%	±10%
<b>Environmental/Temperature</b>					
Operating (ambient, min °C)	5	0	0	0	0
Operating (drive case, max °C) <sup>4</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	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.010in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.010in
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, typical)	716g/1.579lb	630g/1.389lb	610g/1.345lb	610g/1.345lb	490g/1.08lb
Carton Unit Quantity	20	20	20	20	25
Cartons per Pallet/Cartons per Layer	40/8	40/8	40/8	40/8	40/8

<sup>1</sup> Tested and verified using embedded NVR – 64-ch HD recording, 1080P 25 fps H.265

<sup>2</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>3</sup> 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	4TB	3TB	2TB	2TB	1TB
Standard Model Numbers	ST4000VX000	ST3000VX009	ST2000VX012	ST2000VX003	ST1000VX005
SkyHawk™ Health Management Included	Yes	—	—	—	—
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Recording Technology	CMR	CMR	SMR	CMR	CMR
Drive Design	Air	Air	Air	Air	Air
<b>Features and Performance</b>					
Drive Bays Supported	Up to 16	Up to 8	Up to 8	Up to 8	Up to 8
Cameras Supported <sup>1</sup>	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64
RV Sensors	Yes	—	—	—	—
Max Sustained Transfer Rate OD (MB/s)	190MB/s	180MB/s	180MB/s	180MB/s	180MB/s
Cache (MB)	64	256	256	64	64
<b>Reliability/Data Integrity</b>					
Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Load/Unload Cycles	300,000	600,000	600,000	300,000	—
Nonrecoverable Read Errors Rate, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Power-On Hours per year	8760	8760	8760	8760	8760
Workload Rate Limit (WRL) <sup>2</sup>	180	180	180	180	180
Mean Time Between Failures (MTBF) (hours)	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr	1,000,000hr
Warranty, Limited (years) <sup>3</sup>	3	3	3	3	3
<b>Power Management</b>					
Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Average Operating Power (W)	5.5W	3.5W	3.7W	5.6W	5.6W
Idle Average (W)	3.2W	2.5W	2.5W	4.0W	4.0W
Standby Mode/Sleep Mode, Typical (W)	0.25/0.25	0.25/0.25	0.25/0.25	0.5/0.5	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	0	0	0	0
Operating (drive case, max °C) <sup>4</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	20.20mm/0.795in	20.20mm/0.795in	26.11mm/1.028in	20.20mm/0.795in
Width (mm/in, max)	101.85mm/4.010in	101.85mm/4.01in	101.85mm/4.01in	101.85mm/4.010in	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, typical)	608g/1.345lb	490g/1.08lb	415g/0.915lb	610g/1.345lb	415g/0.915lb
Carton Unit Quantity	20	25	25	20	25
Cartons per Pallet/Cartons per Layer	40 / 8	40/8	40/8	40 / 8	40/8

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