



3.5 HARD DRIVE DATA SHEET

Smart. Safe. Secure. Surveillance-Optimised Storage

Seagate<sup>®</sup> SkyHawk<sup> $^{\text{TM}}$ </sup> AI is the world's first, purpose-built drive for artificial intelligence (AI)-enabled surveillance solutions.





## **Best-Fit Applications**

- Network video recorders (NVR)
- Al-enabled NVR systems



## Key Advantages

ImagePerfect<sup>™</sup> Al firmware for superior image integrity alongside additional Al workload support in always-on, Al-enabled surveillance systems.

**Custom designed to support an additional 32 Al streams** while simultaneously and flawlessly recording footage up to 64 HD cameras.

**Designed and built to handle heavy surveillance workloads** in traditional video recording and in advanced video analytics environments. At 550 TB/year, SkyHawk AI is designed for 3× the workload of standard surveillance drives.

**Advanced vibration management** for superior and sustained performance in 16+bay NVR systems.

**SkyHawk Health Management** actively helps protect your surveillance storage by focusing on prevention, intervention, and recovery options. Included is RAID RapidRebuild, which provides  $3 \times$  faster volume rebuilds.

**Improved reliability** and reduced total cost of ownership with 1.5M-hr. MTBF and 3-year limited warranty.

**Unparalleled data protection** with an optional 2-year Rescue Data Recovery Services plan, providing access to Seagate's secure labs with industry-leading data recovery success rates.

<sup>1</sup> Contact your Seagate sales representative for further information.





Al Streams   32   32   32   32   32   32   32   3	Specifications	16 TB	14 TB	12 TB	10 TB	10 TB
Interface SATA 6 Gb/s SATA 6 G	Capacity	16TB	14TB	12TB	10TB	10TB
Drive Bays Supported   16+	Standard Model Numbers	ST16000VE000	ST14000VE0008	ST12000VE0008	ST10000VE0008	ST10000VE0004
Drive Bays Supported	Interface	SATA 6 Gb/s				
Al Streams   32   32   32   32   32   32   32   3	Features and Performance					
HD Cameras Supported	Drive Bays Supported	16+	16+	16+	16+	16+
New Year   Yea	Al Streams	32	32	32	32	32
Max. Sustained Transfer Rate OD (MB/s)         250MB/s         250MB/s         250MB/s         250MB/s         250MB/s         235MB/s           Cache (MB)         256         256         256         256         256         256           Reliability/Data Integrity           Tarmish Resistant         Yes	HD Cameras Supported	Up to 64				
Cache (MB)   256	RV Sensors	Yes	Yes	Yes	Yes	Yes
Tarnish Resistant	Max. Sustained Transfer Rate OD (MB/s)	250MB/s	250MB/s	250MB/s	250MB/s	235MB/s
Tamish Resistant	Cache (MB)	256	256	256	256	256
Dead/Unload Cycles   300,000   300,000   300,000   300,000   300,000   300,000   300,000   300,000   Non-recoverable Read Errors per Bits Read, Max   1 per 10E15   1 pe	Reliability/Data Integrity					
Non-recoverable Read Errors per Bits Read, Max	Tarnish Resistant	Yes	Yes	Yes	Yes	Yes
Power-On Hours per Year (24x7)	Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000
Workload Rate Limit (WRL)²         550         550         550         550           MTBF         1,500,000 hr         1,500 hr <t< td=""><td>Non-recoverable Read Errors per Bits Read, Max</td><td>1 per 10E15</td><td>1 per 10E15</td><td>1 per 10E15</td><td>1 per 10E15</td><td>1 per 10E15</td></t<>	Non-recoverable Read Errors per Bits Read, Max	1 per 10E15				
MTBF	Power-On Hours per Year (24×7)	8,760	8,760	8,760	8,760	8,760
Warranty, Limited (years)   3   3   3   3   3   3   3   3   3	Workload Rate Limit (WRL) <sup>2</sup>	550	550	550	550	550
Power Management   Startup Current, Typical (12V, A)   1.8   1.8   1.8   1.8   1.8   1.8   1.8   1.8   Average Operating Power (W)   6.71 W   6.9 W   6.9 W   6.9 W   6.9 W   4.9 W	MTBF	1,500,000 hr				
Startup Current, Typical (12V, A)         1.8         1.8         1.8         1.8         1.8         1.8           Average Operating Power (W)         6.71 W         6.9 W         6.9 W         6.9 W         7.2 W           Idling Average (W)         5.1 W         4.9 W         4.9 W         4.9 W         4.9 W           Standby Mode/Sleep Mode, Typical (W)         1.05/1.05         1.2/1.2         1.2/1.2         1.2/1.2         0.8/0.8           Voltage Tolerance (5 V)         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%           Voltage Tolerance (12 V)         ±10%	Warranty, Limited (years) <sup>3</sup>	3	3	3	3	3
Average Operating Power (W) 6.71 W 6.9 W 6.9 W 6.9 W 4.9 W 4	Power Management					
Idling Average (W)         5.1 W         4.9 W <td>Startup Current, Typical (12V, A)</td> <td>1.8</td> <td>1.8</td> <td>1.8</td> <td>1.8</td> <td>1.8</td>	Startup Current, Typical (12V, A)	1.8	1.8	1.8	1.8	1.8
Standby Mode/Sleep Mode, Typical (W)         1.05/1.05         1.2/1.2         1.2/1.2         1.2/1.2         0.8/0.8           Voltage Tolerance (5 V)         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±5%         ±10%	Average Operating Power (W)	6.71 W	6.9 W	6.9 W	6.9 W	7.2 W
Voltage Tolerance (5 V)         ±5%         ±10%	Idling Average (W)	5.1 W	4.9 W	4.9 W	4.9 W	4.9 W
Voltage Tolerance (12 V)         ±10%         ±10%         ±10%         ±10%         ±10%           Environmental/Temperature           Operating (ambient, min °C)         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         70 <t< td=""><td>Standby Mode/Sleep Mode, Typical (W)</td><td>1.05/1.05</td><td>1.2/1.2</td><td>1.2/1.2</td><td>1.2/1.2</td><td>0.8/0.8</td></t<>	Standby Mode/Sleep Mode, Typical (W)	1.05/1.05	1.2/1.2	1.2/1.2	1.2/1.2	0.8/0.8
Environmental/Temperature   Operating (ambient, min °C)   5   5   5   5   5   5   5   5   5	Voltage Tolerance (5 V)	±5%	±5%	±5%	±5%	±5%
Operating (ambient, min °C)         5         5         5         5         5           Operating (drive case, max °C) <sup>4</sup> 70         70         70         70         70           Non-operating (ambient, min °C)         -40         -40         -40         -40         -40         -40           Physical           Height (mm/in, max)         26.11 mm/1.028 in 101.85 mm/4.01 in 101.85 mm/5.787 in 146.99 mm/5.787 in in in in 101.85 mm/5.787 in 146.99 mm/5.787 in in in 101.85 mm/5.787 in 10.99 mm/5.781 in 10.99 mm/5.787 in 10.99 mm/5.781 in	Voltage Tolerance (12 V)	±10%	±10%	±10%	±10%	±10%
Operating (drive case, max °C) <sup>4</sup> 70         70         70         70         70           Non-operating (ambient, min °C)         -40 <t< td=""><td>Environmental/Temperature</td><td></td><td></td><td></td><td></td><td></td></t<>	Environmental/Temperature					
Non-operating (ambient, min °C)  -40  -40  -40  -40  -40  -40  -40  -4	Operating (ambient, min °C)	5	5	5	5	5
Physical           Height (mm/in, max)         26.11 mm/1.028 in 101.85 mm/4.01 in	Operating (drive case, max °C) <sup>4</sup>	70	70	70	70	70
Height (mm/in, max)         26.11 mm/1.028 in 26.11	Non-operating (ambient, min °C)	-40	-40	-40	-40	-40
Width (mm/in, max)         101.85 mm/4.01 in log mm/5.787 land min log min	Physical					
Depth (mm/in, max)         146.99 mm/5.787 in         690 g/1.521 lb         690	Height (mm/in, max)	26.11 mm/1.028 in				
Depth (mm/in, max)         in         in         in         in         in           Weight (lb/g)         670 g/1.477 lb         690 g/1.521 lb         690 g/1.521 lb         690 g/1.521 lb         690 g/1.521 lb         650 g/1.433 lb	Width (mm/in, max)	101.85 mm/4.01 in				
Weight (lb/g) 670 g/1.477 lb 690 g/1.521 lb 690 g/1.521 lb 690 g/1.521 lb 650 g/1.433 lb	Depth (mm/in, max)					
	Weight (lb/g)	-				
Carton Unit Quantity 20 20 20 20 20 20						
Cartons per Pallet / Cartons per Layer         40/8         40/8         40/8         40/8	•	+		40/8		40/8

<sup>1 32</sup> Al streams = 16 Al channels.

<sup>2</sup> SkyHawk Al surveillance drives are designed for always-on workloads of 550 TB/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 product.





Specifications	8 TB	8 TB			
Capacity	8TB	8TB			
Standard Model Numbers	ST8000VE000	ST8000VE0004			
Interface	SATA 6 Gb/s	SATA 6 Gb/s			
Features and Performance					
Drive Bays Supported	16+	16+			
Al Streams	32	32			
HD Cameras Supported	Up to 64	Up to 64			
RV Sensors	Yes	Yes			
Max. Sustained Transfer Rate OD (MB/s)	235MB/s	235MB/s			
Cache (MB)	256	256			
Reliability/Data Integrity					
Tarnish Resistant	Yes	Yes			
Load/Unload Cycles	300,000	300,000			
Non-recoverable Read Errors per Bits Read, Max	1 per 10E15	1 per 10E15			
Power-On Hours per Year (24×7)	8,760	8,760			
Workload Rate Limit (WRL) <sup>2</sup>	550	550			
MTBF	1,500,000 hr	1,500,000 hr			
Warranty, Limited (years) <sup>3</sup>	3	3			
Power Management					
Startup Current, Typical (12V, A)	1.8	1.8			
Average Operating Power (W)	8.73 W	7.2 W			
Idling Average (W)	7.5 W	4.9 W			
Standby Mode/Sleep Mode, Typical (W)	0.96/0.96	0.8/0.8			
Voltage Tolerance (5 V)	+10%/-5%	±5%			
Voltage Tolerance (12 V)	±10%	±10%			
Environmental/Temperature					
Operating (ambient, min °C)	5	5			
Operating (drive case, max °C) <sup>4</sup>	70	70			
Non-operating (ambient, min °C)	-40	-40			
Physical					
Height (mm/in, max)	26.11 mm/1.028 in	26.11 mm/1.028 in			
Width (mm/in, max)	101.85 mm/4.01 in	101.85 mm/4.01 in			
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in			
Weight (lb/g)	716 g/1.579 lb	650 g/1.433 lb			
Carton Unit Quantity	20	20			
Cartons per Pallet / Cartons per Layer	40/8	40/8			

<sup>1 32</sup> Al streams = 16 Al channels.

- 2 SkyHawk Al surveillance drives are designed for always-on workloads of 550 TB/year. For higher transaction workloads, see Seagate's enterprise-class drive offerings.
- ${\tt 3\ Extended\ warranty\ options\ available.\ Consult\ your\ distributor\ for\ details.}$
- 4 Seagate does not recommend operating at sustained extreme temperatures. Operating at higher temperatures will reduce useful life of the product.

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