

# Surveillance HDD

Data Sheet

## The New Generation SV Drive

- The industry's first surveillance-optimised hard drive precision-tuned for high write surveillance workloads operating 24x7
- Capacities up to 8TB support 64 cameras per drive and 8+<sup>1</sup> drives per system
- Engineered for workloads of 180TB/year, three times that of desktop drives
- Low power consumption and startup current to minimise heat and vibration emission, improving long-term drive reliability
- Tarnish-resistant components to help protect drive from environmental elements, increasing field reliability
- Customise power settings for incremental savings during system downtime without compromising time to record
- Reliable performance in multi-drive systems with support from RV sensors
- Optional 3-year +Rescue Data Recovery Service plan to help protect against data loss from viruses, software issues or mechanical and electrical breakdowns

## Best-Fit Applications

- NVR
- Embedded SDVR
- Hybrid SDVR
- Surveillance DVR



<sup>1</sup>Drives with Rotational Vibration sensors can be used in systems with 8+ drive bays. Drives without Rotational Vibration are ideal for systems with 8 or fewer drives.

# Surveillance HDD



Specifications	Surveillance HDD						
	8TB	6TB	5TB	4TB	3TB	2TB	1TB
Capacity	8TB	6TB	5TB	4TB	3TB	2TB	1TB
Standard Model Numbers	ST8000VX0002	ST6000VX0001	ST5000VX0001	ST4000VX0000	ST3000VX0006	ST2000VX0003	ST1000VX0001
+Rescue Model Numbers	ST8000VX0012	ST6000VX0011	ST5000VX0011	ST4000VX0002	ST3000VX0005	ST2000VX0005	ST1000VX0003
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache	256 MB	128 MB	128 MB	64 MB	64 MB	64 MB	64 MB
Bytes per Sector	4096	4096	4096	4096	4096	4096	4096
<b>Performance</b>							
R/V (Rotational Vibration) Sensor	Yes	Yes	Yes	Yes	No	No	No
Drive bays supported	8+	8+	8+	8+	1 to 8	1 to 8	1 to 8
Cameras Supported	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64	Up to 64
Max Sustainable Transfer Rate	230MB/s	180MB/s	180MB/s	180MB/s	180MB/s	180MB/s	180MB/s
<b>+Rescue Data Recovery Service</b>							
3-Year Option With +Rescue Model	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Voltage</b>							
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12V)	±10%	±10%	±10%	±10%	±10%	±10%	±10%
<b>Power Management</b>							
Startup Power (12V, A)	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Average Operating Power	9 W	9 W	9 W	5.6 W	5.6 W	5.6 W	5.6 W
Idling Average (W)	7.6 W	7.2 W	7.2 W	4 W	4 W	4 W	4 W
Standby Mode	0.6 W	0.6 W	0.6 W	0.5 W	0.5 W	0.5 W	0.5 W
Sleep Mode	0.6 W	0.6 W	0.6 W	0.5 W	0.5 W	0.5 W	0.5 W
<b>Environmental/Temperature</b>							
Operating (ambient, min)	5°C	5°C	5°C	0°C	0°C	0°C	0°C
Operating (drive case, max)	70°C	70°C	70°C	70°C	70°C	70°C	75°C
Non-operating (ambient, min)	-40°C	-40°C	-40°C	-40°C	-40°C	-40°C	-40°C
Non-operating (ambient, max)	70°C	70°C	70°C	70°C	70°C	70°C	70°C
<b>Reliability</b>							
Tarnish Resistant <sup>1</sup>	Yes	Yes	Yes	Yes	No	No	No
Load/Unload Cycles <sup>2</sup>	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 per 10E15	1 per 10E15	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
MTBF (Hours)	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr	1,000,000 hr
Power-on Hours	8,760	8,760	8,760	8,760	8,760	8,760	8,760
Warranty, Limited (years)	3	3	3	3	3	3	3
<b>Physical</b>							
Height (mm/in)	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	26.11 mm/1.028 in	20 mm/0.787 in
Width (mm/in, max)	101.85 mm/4.01 in	101.85 mm/4.01 in	101.85 mm/4.01 in	101.6 mm/4 in	101.6 mm/4 in	101.6 mm/4 in	101.85 mm/4 in
Depth (mm/in, max)	147 mm/5.878 in	147 mm/5.878 in	147 mm/5.878 in	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in	147 mm/5.787 in
Weight (lb/g)	780 g/1.72 lb	780 g/1.72 lb	780 g/1.54 lb	610 g/1.345 lb	610 g/1.38 lb	610 g/1.18 lb	400 g/0.92 lb
Carton Unit Quantity	20	20	20	20	20	20	25
Cartons per Pallet / Cartons per Layer	40	40 / 8	40 / 8	40	40	40	40

<sup>1</sup> Product will ship with tarnish-resistant components in early 2016.

<sup>2</sup> Load/Unload tested to 600,000 cycles.



# Surveillance HDD



Specifications	SV35 Series™		
	3TB	2TB	1TB
Capacity	3TB	2TB	1TB
Standard Model Numbers	ST3000VX000	ST2000VX000	ST1000VX000
+Rescue Model Numbers	ST3000VX004	ST2000VX004	ST1000VX002
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache	64 MB	64 MB	64 MB
Bytes per Sector	4096	4096	4096
<b>Performance</b>			
R/V (Rotational Vibration) Sensor	No	No	No
Drive bays supported	1 to 8	1 to 8	1 to 8
Cameras Supported	Up to 32	Up to 32	Up to 32
Max Sustainable Transfer Rate	210MB/s	210MB/s	210MB/s
<b>+Rescue Data Recovery Service</b>			
3-Year Option With +Rescue Model	Yes	Yes	Yes
<b>Voltage</b>			
Voltage Tolerance, Inc. Noise (5V)	±5%	±5%	±5%
Voltage Tolerance, Inc. Noise (12V)	+10%/–7.5%	+10%/–7.5%	+10%/–7.5%
<b>Power Management</b>			
Startup Power (12V, A)	2	2	2
Average Operating Power	8 W	8 W	5.9 W
Idling Average (W)	5.4 W	5.4 W	3.36 W
Standby Mode	0.75 W	0.75 W	0.63 W
Sleep Mode	0.75 W	0.75 W	0.63 W
<b>Environmental/Temperature</b>			
Operating (ambient, min)	0°C	0°C	0°C
Operating (drive case, max)	70°C	70°C	70°C
Non-operating (ambient, min)	-40°C	-40°C	-40°C
Non-operating (ambient, max)	70°C	70°C	70°C
<b>Reliability</b>			
Tarnish Resistant <sup>1</sup>	—	—	—
Load/Unload Cycles <sup>2</sup>	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
MTBF (Hours)	1,000,000 hr	1,000,000 hr	1,000,000 hr
Power-on Hours	8,760	8,760	8,760
Warranty, Limited (years)	3	3	3
<b>Physical</b>			
Height (mm/in)	26.11 mm/1.028 in	26.11 mm/1.028 in	19.99 mm/0.787 in
Width (mm/in, max)	101.6 mm/4 in	101.6 mm/4 in	101.6 mm/4 in
Depth (mm/in, max)	146.99 mm/5.787 in	146.99 mm/5.787 in	146.99 mm/5.787 in
Weight (lb/g)	626 g/1.38 lb	626 g/1.38 lb	400 g/0.88 lb
Carton Unit Quantity	20	20	25
Cartons per Pallet / Cartons per Layer	40	40	40

<sup>1</sup> Product will ship with tarnish-resistant components in early 2016.

<sup>2</sup> Load/Unload tested to 600,000 cycles.

SEAGATE.COM

AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, 408-658-1000

ASIA/PACIFIC Seagate Singapore International Headquarters Pte. Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888

EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 16-18, rue du Dôme, 92100 Boulogne-Billancourt, France, 33 1-4186 10 00

© 2016 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Spiral logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. SV35 Series and +Rescue are either trademarks or registered trademarks of Seagate Technology LLC or one of its affiliated companies in the United States and/or other countries. All other trademarks or registered trademarks are the property of their respective owners. When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual data rates may vary depending on operating environment and other factors. The export or re-export of Seagate hardware or software is regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit [www.bis.doc.gov](http://www.bis.doc.gov)), and may be controlled for export, import and use in other countries. Seagate reserves the right to change, without notice, product offerings or specifications. DS1679.16-1601US January 2016