

# Surveillance HDD

## Data Sheet

### The New Generation SV Drive

- The industry's first surveillance-optimised hard drive platform with capacities up to 6TB improves video streaming, drive performance and data integrity in surveillance applications.
- The seventh generation Seagate® surveillance drive is tuned for high write-cycle workloads typical in video surveillance storage systems.
- The Surveillance HDD supports higher-resolution cameras and 8+<sup>1</sup> drives per system, with up to 64 cameras per drive.
- Reliably performs in multi-drive systems with support from RV sensors.
- 24x7 operational capabilities while maintaining high MTBF of 1M hours.
- Low power consumption options and current-limited startup support always-on surveillance systems.
- Never miss a frame with quick time-to-ready.
- Idle 3 spin control features enable power-on in standby mode or drive spin-down to conserve power and improve reliability during archival periods.
- Engineered for 24x7 workloads of 180TB/year, three times that of desktop drives.
- Optional 3-year +Rescue Data Recovery Service plan protects 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	6TB <sup>1</sup>	5TB <sup>1</sup>	4TB <sup>1</sup>	3TB <sup>1</sup>	3TB <sup>1</sup>	2TB <sup>1</sup>	1TB <sup>1</sup>
Marketing Name	Surveillance HDD	Surveillance HDD	Surveillance HDD	Surveillance HDD	Surveillance HDD	Surveillance HDD	Surveillance HDD
Model Number	ST6000VX0001	ST5000VX0001	ST4000VX000	ST3000VX002	ST3000VX006	ST2000VX003	ST1000VX001
+Rescue Model Number	ST6000VX0011	ST5000VX0011	ST4000VX002	—	ST3000VX005	ST2000VX005	ST1000VX003
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache, MB	128	128	64	64	64	64	64
Bytes per Sector	4,096	4,096	4,096	4,096	4,096	4,096	4,096
<b>Surveillance Performance</b>							
R/V (Rotational Vibration) Sensor	Y	Y	Y	Y	N	N	N
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 Sustained Data Rate, OD Read (MB/s)	180	180	180	180	180	180	180
<b>+Rescue Data Recovery Service</b>							
3-Year Option With +Rescue Model	Y	Y	Y	N	Y	Y	Y
<b>Voltage</b>							
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	±10%	±10%	±10%	±10%	±10%
<b>Power Management</b>							
Startup Current, Average (12V, A)	1.8	1.8	1.8	1.8	1.8	1.8	1.2
Operating Mode, Typical (W)	9	9	5.6	5.6	5.6	5.6	5.6
Idling Average (W)	7.2	7.2	4.0	4.0	4.0	4.0	4.0
Standby Mode (W)	0.6	0.6	0.5	0.5	0.5	0.5	0.5
Sleep Mode (W)	0.6	0.6	0.5	0.5	0.5	0.5	0.5
<b>Environmental</b>							
Temperature							
Operating (ambient, min °C)	5	5	0	0	0	0	0
Operating (drive case, max °C)	60	60	70	70	70	70	70
Non-operating (ambient, min °C)	-40	-40	-40	-40	-40	-40	-40
Non-operating (ambient max °C)	70	70	70	70	70	70	70
<b>Reliability</b>							
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>
Mean Time Between Failures (MTBF, hours)	1M	1M	1M	1M	1M	1M	1M
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)	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	19.98/0.787
Width (mm/in)	101.85/4.010	101.85/4.010	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0	101.6/4.0
Depth (mm/in)	147.0/5.878	147.0/5.878	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb)	780/1.720	780/1.720	610/1.345	610/1.345	610/1.345	610/1.345	400/0.88
Carton Unit Quantity	20	20	20	20	20	20	25
Cartons per Pallet	40	40	40	40	40	40	40
Cartons per Layer	8	8	8	8	8	8	8

<sup>1</sup> One gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.





# Surveillance HDD



Specifications	3TB <sup>1</sup>	2TB <sup>1</sup>	1TB <sup>1</sup>
Marketing Name	SV35 Series™	SV35 Series	SV35 Series
Model Number	ST3000VX000	ST2000VX000	ST1000VX000
+Rescue Model Number	ST3000VX004	ST2000VX004	ST1000VX002
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache, MB	64	64	64
Bytes per Sector	4,096	4,096	4,096
<b>Surveillance Performance</b>			
R/V (Rotational Vibration) Sensor	N	N	N
Drive Bays Supported	1 to 8	1 to 8	1 to 8
Cameras Supported	up to 32	up to 32	up to 32
Max Sustained Data Rate, OD Read (MB/s)	210	210	210
<b>+Rescue Data Recovery Service</b>			
3-Year Option With +Rescue Model	Y	Y	Y
<b>Voltage</b>			
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	+10%/–7.5%	+10%/–7.5%	+10%/–7.5%
<b>Power Management</b>			
Startup Current, Average (12V, A)	2.0	2.0	2.0
Operating Mode, Typical (W)	8.0	8.0	5.90
Idling Average (W)	5.40	5.40	3.36
Standby Mode (W)	0.75	0.75	0.63
Sleep Mode (W)	0.75	0.75	0.63
<b>Environmental</b>			
Temperature			
Operating (ambient, min °C)	0	0	0
Operating (drive case, max °C)	70	70	70
Non-operating (ambient, min °C)	–40	–40	–40
Non-operating (ambient max °C)	70	70	70
<b>Reliability</b>			
Load/Unload Cycles	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>	1 per 10 <sup>14</sup>
Mean Time Between Failures (MTBF, hours)	1M	1M	1M
Power-on Hours	8,760	8,760	8,760
Warranty, Limited (years)	3	3	3
<b>Physical</b>			
Height (mm/in)	26.11/1.028	26.11/1.028	19.98/0.787
Width (mm/in)	101.6/4.0	101.6/4.0	101.6/4.0
Depth (mm/in)	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb)	626/1.38	626/1.38	400/0.88
Carton Unit Quantity	20	20	25
Cartons per Pallet	40	40	40
Cartons per Layer	8	8	8

<sup>1</sup> One gigabyte, or GB, equals one billion bytes; and one terabyte, or TB, equals one trillion bytes when referring to drive capacity.



seagate.com

AMERICAS Seagate Technology LLC 10200 South De Anza Boulevard, Cupertino, California 95014, United States, +1 408 658 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 41 86 10 00

© 2015 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. QuietStep is either a trademark or registered trademark 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. Seagate reserves the right to change, without notice, product offerings or specifications. DS1679.14-1505GB, May 2015