

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.
- 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 up to 16 drives per system, with up to 32 cameras per drive.
- Reliably performs in multi-drive systems with RAID support from RV sensors.
- 24x7 operational capabilities while maintaining high MTBF of 1M hours.
- Options for a current-limited startup of less than 2A supports the use of embedded system power supplies.
- Low power consumption options 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.
- 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





Surveillance HDD



Specifications	6TB ¹	5TB ¹	4TB ¹	3 TB ¹	3TB ¹	2TB ¹	1TB ¹
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 6 Gb/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
Surveillance Performance							
R/V (Rotational Vibration) Sensor	Y	Y	Y	Y	N	N	N
Drive Bays Supported	1 to 16	1 to 16	1 to 16	1 to 16	1 to 8	1 to 8	1 to 8
Cameras Supported	up to 32	up to 32	up to 32	up to 32	up to 32	up to 32	up to 32
Max Sustained Data Rate, OD Read (MB/s)	180	180	180	180	180	180	180
+Rescue Data Recovery Service							
3-Year Option With +Rescue Model	Y	Y	Y	N	Y	Y	Y
Voltage							
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	±10%	±10%	±10%	±10%	±10%
Power Management							
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
Environmental							
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
Reliability							
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 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
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
Physical							
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

¹ 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 ¹	2TB ¹	1TB ¹
Marketing Name	SV35 Series™	SV35 Series	SV35 Series
Model Number	ST3000VX000	ST2000VX000	ST1000VX000
+Rescue Model Number	ST3000VX004	ST2000VX004	ST1000VX002
Interface	SATA 6 Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache, MB	64	64	64
Bytes per Sector	4,096	4,096	4,096
Surveillance Performance			
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
+Rescue Data Recovery Service			
3-Year Option With +Rescue Model	Y	Y	Y
Voltage			
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	+10%/-7.5%	+10%/-7.5%	+10%/-7.5%
Power Management			
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
Environmental			
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
Reliability			
Load/Unload Cycles	300,000	300,000	300,000
Non-recoverable Read Errors per Bits Read, Max	1 per 10 ¹⁴	1 per 10 ¹⁴	1 per 10 ¹⁴
Mean Time Between Failures (MTBF, hours)	1M	1M	1M
Power-on Hours	8,760	8,760	8,760
Warranty, Limited (years)	3	3	3
Physical			
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

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