

Surveillance HDD

Data Sheet

Helps Improve Costs and Data Integrity

- The industry's first surveillance-optimized 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
- Supplement your backups with Seagate Recovery Services for data recovery in the event of data loss or accident.
- 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.
- Idle3 spin control features enable power-on in standby mode or drive spin-down to conserve power and improve reliability during archival periods.

Best-Fit Applications

- NVR
- Embedded SDVR
- Hybrid SDVR
- Surveillance DVR



Surveillance HDD



Specifications	6TB ¹	5TB ¹	4TB ¹	3TB ¹	2TB ¹	1TB ¹
Marketing Name	Surveillance HDD	Surveillance HDD	Surveillance HDD	Surveillance HDD	Surveillance HDD	Surveillance HDD
Model Number	ST6000VX0001	ST5000VX0001	ST4000VX000	ST3000VX002	ST2000VX003	ST1000VX001
Seagate Recovery Services Model Number	ST6000VX0011	ST5000VX0011	ST4000VX002	—	—	—
Interface	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
Bytes per Sector	4096	4096	4096	4096	4096	4096
Surveillance Performance						
R/V (Rotational Vibration) Sensor	Y	Y	Y	Y	N	N
Drive Bays Supported	1 to 16	1 to 16	1 to 16	1 to 16	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
Max Sustained Data Rate, OD Read (MB/s)	180	180	180	180	180	180
Voltage						
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	±10%	±10%	±10%	±10%
Power Management						
Startup Current 12V (A)	1.8	1.8	1.8	1.8	1.8	1.2
Operating Mode, Typical (W)	8	8	5.6	5.6	5.6	5.6
Idle Average (W)	6.7	6.7	4.0	4.0	4	4
Standby Mode (W)	0.5	0.5	0.5	0.5	0.5	0.5
Sleep Mode (W)	0.5	0.5	0.5	0.5	0.5	0.5
Environmental						
Temperature						
Operating (ambient, min °C)	5	5	0	0	0	0
Operating (drive case, max °C)	60	60	70	70	70	70
Nonoperating (ambient, min °C)	-40	-40	-40	-40	-40	-40
Nonoperating (ambient, max °C)	70	70	70	70	70	70
Reliability						
Load/Unload Cycles	300,000	300,000	300,000	300,000	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14	1 per 10E14
Mean Time Between Failures (MTBF, hours)	1M	1M	1M	1M	1M	1M
Power-On Hours	8760	8760	8760	8760	8760	8760
Warranty, Limited (years)	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	19.98/0.787
Width (mm/in)	101.85/4.010	101.85/4.010	101.6/4.0	101.6/4.0	101.6/4.2	101.6/4.0
Depth (mm/in)	147.0/5.878	147.0/5.878	146.99/5.787	146.99/5.787	146.99/5.789	146.99/5.787
Weight (g/lb)	780/1.720	780/1.720	610/1.345	610/1.345	610/1.347	400/0.88
Carton Unit Quantity	20	20	20	20	20	25
Cartons per Pallet	40	40	40	40	40	40
Cartons per Layer	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
Seagate Recovery Services Model Number	ST3000VX004	ST2000VX004	ST1000VX002
Interface	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache, MB	64	64	64
Bytes per Sector	4096	4096	4096
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
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 12V (A)	2.0	2.0	2.0
Operating Mode, Typical (W)	8.0	8.0	5.90
Idle 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
Nonoperating (ambient, min °C)	–40	–40	–40
Nonoperating (ambient, max °C)	70	70	70
Reliability			
Load/Unload Cycles	300,000	300,000	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10E14	1 per 10E14	1 per 10E14
Mean Time Between Failures (MTBF, hours)	1M	1M	1M
Power-On Hours	8760	8760	8760
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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