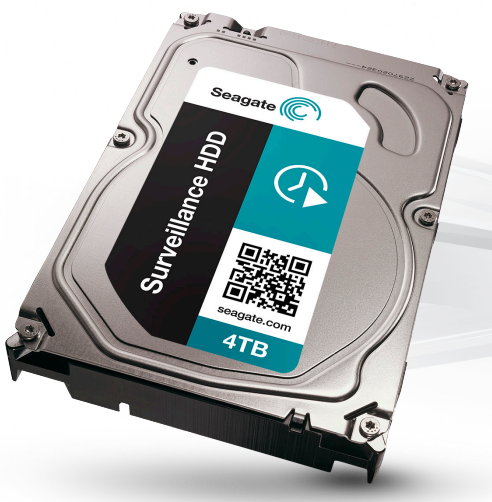# Surveillance HDD

Data Sheet

Helps Improve Costs and Data Integrity

- The industry's first surveillance-optimised hard drive platform with 1, 2, 3 and 4TB capacity options improves video streaming and data integrity in surveillance applications.

- Seventh-generation Seagate® surveillance drive is tuned for high write-cycle workloads typical in video surveillance storage systems.

- 4TB of storage capacity 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

- 24×7 operational capabilities while maintaining high AFR of <1%

- 2A current-limited startup to support the use of embedded system power supplies

- 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

Seagate ®

Specifications	4TB[1]	3TB[1]	3TB[1]	2TB[1]	1TB[1]
Marketing Name	Surveillance HDD	Surveillance HDD	SV35 Series™	SV35 Series	SV35 Series
Model Number	ST4000VX000	ST3000VX002	ST3000VX000	ST2000VX000	ST1000VX000
Interface	SATA 6 Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s	SATA 6Gb/s
Cache Multi-segmented (MB)	64	64	64	64	64
Bytes per Sector	4,096	4,096	4,096	4,096	4,096
Surveillance Performance					
RV (Rotational Vibration) Sensor	Y	Y	N	N	N
Drive Bays Supported	1 to 16	1 to 16	1 to 6	1 to 6	1 to 6
Cameras Supported	up to 32	up to 32	up to 32	up to 32	up to 32
Seek Average, Read (ms)	<9.5	<9.5	<8.5	<8.5	<8.5
Seek Average, Write (ms)	<9.5	<9.5	<9.5	<9.5	<9.5
Average Data Rate, Read/Write (MB/s)	146	146	156	156	156
Max Sustained Data Rate, OD Read (MB/s)	180	180	210	210	210
Voltage					
Voltage Tolerance, Including Noise (5V)	±5%	±5%	±5%	±5%	±5%
Voltage Tolerance, Including Noise (12V)	±10%	±10%	+10%/−7.5%	+10%/−7.5%	+10%/−7.5%
Power Management					
Startup Power (A)	2.0	2.0	2.0	2.0	2.0
Operating Mode, Typical (W)	5.6	5.6	8.0	8.0	5.90
Idling Average (W)	4.0	4.0	5.40	5.40	3.36
Standby Mode (W)	0.5	0.5	0.75	0.75	0.63
Sleep Mode (W)	0.5	0.5	0.75	0.75	0.63
Environmental					

Temperature
  Operating (ambient, min °C)
  Operating (drive case, max °C)
  Non-operating (ambient, min °C)
  Non-operating (ambient max °C)
	0
	70
	−40
	70
		0
		70
		−40
		70
			0
			70
			−40
			70
				0
				70
				−40
				70
					0
					70
					−40
					70

Reliability					
Load/Unload Cycles	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}	2 per 10^{14}	3 per 10^{14}
Annualised Failure Rate (AFR)	<1%	<1%	<1%	<1%	<1%
Power-on Hours	8,760	8,760	8,760	8,760	8,760
Warranty, Limited (years)	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	20.17/0.7825
Width (mm/in)	101.6/4.0	101.6/4.0	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	146.99/5.787	146.99/5.787
Weight (g/lb)	610/1.345	610/1.345	626/1.38	626/1.38	400/0.88
Carton Unit Quantity	20	20	20	20	25
Cartons per Pallet	40	40	40	40	40
Cartons per Layer	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.

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