

Data Sheet

## SV35.2 Series

3.5-inch hard drives for video surveillance

**750, 500, 320, 250, 160 GB\* • SATA 3Gb/s, ATA/100\***

### Key Advantages

- >1,000,000 hours MTBF and <1 percent AFR in 24x7 video surveillance applications
- Improved data transfer rates (read/write speeds) for higher-performance video recording
- Reduced heat generation enabling surveillance systems to run cooler and last longer
- Leading-edge capacity points—up to 750 GB—to support the massive amounts of digital video
- Optimized for recording of multiple, simultaneous video streams
- The first video surveillance hard drive with perpendicular recording technology
- Backed by the Seagate® 5-year limited warranty

### Best-Fit Applications

- Video surveillance digital video recorder (SDVR)
- Video surveillance network digital video recorder (SNVR)
- Direct-attached and network-attached JBOD video storage
- Small-footprint video surveillance digital recorder



\*Compatible with UDMA-2, -3 and -4

# SV35.2 Series

## 3.5-inch hard drives for video surveillance



The Seagate® SV35.2 Series™ hard drive is the first drive specifically engineered and optimized for digital video recording in security and surveillance applications.

### Increased SDVR Performance

- Increased video data rates (480 Mb/s) enable higher-performance video recording.
- Optimized to record multiple, simultaneous video streams
- Engineered to maintain high video data integrity

### Higher Reliability

- Designed for 24x7 operation and high write duty cycles
- >1,000,000 hours MTBF in 24x7 video surveillance applications
- Fewer moving parts
- Lower power consumption
- Reduced heat generation

### Greater Capacity

- Industry-leading capacity (750 GB) and range (now includes 320 GB)

### Tailored for the Video Surveillance Industry

- Technical and marketing support infrastructure dedicated to video surveillance customers
- Second-generation SDVR drive—evolving with emerging industry requirements
- Advanced application design and technical advice available through Seagate Design Service Centers in U.S. and Singapore

[www.seagate.com](http://www.seagate.com)

1-800-SEAGATE

(1-800-732-4283)

Specifications	750 GB <sup>1</sup>	500 GB <sup>1</sup>	320 GB <sup>1</sup>	250 GB <sup>1</sup>	160 GB <sup>1</sup>
<b>Model Number</b>	ST3750640AV ST3750640SV	ST3500630AV ST3500630SV	ST3320620AV ST3320620SV	ST3250820AV ST3250820SV	ST3160815AV ST3160815SV
<b>Interface Options</b>	Ultra ATA 100 SATA 3Gb/s	Ultra ATA 100 SATA 3Gb/s	Ultra ATA 100 SATA 3Gb/s	Ultra ATA 100 SATA 3Gb/s	Ultra ATA 100 SATA 3Gb/s
<b>Performance</b>					
<b>Spindle Speed (RPM)</b>	7200	7200	7200	7200	7200
<b>Average Seek (ms, typical)</b>					
Read	17	17	17	17	17
Write	14	14	14	14	14
<b>Cache, Multisegmented (Mb)</b>	16	16	16	8	8
<b>ATA Transfer Modes Supported</b>	PIO modes 0-4, Multiword DMA modes 0-2, Ultra DMA modes 0-6	PIO modes 0-4, Multiword DMA modes 0-2, Ultra DMA modes 0-6	PIO modes 0-4, Multiword DMA modes 0-2, Ultra DMA modes 0-6	PIO modes 0-4, Multiword DMA modes 0-2, Ultra DMA modes 0-6	PIO modes 0-4, Multiword DMA modes 0-2, Ultra DMA modes 0-6
<b>SATA Data Transfer Modes Supported (Gb/s)</b>	3	3	3	3	3
<b>Track-to-Track Seek (ms, typical)</b>					
Read	<0.8	<0.8	<0.8	<0.8	<0.8
Write	<1.0	<1.0	<1.0	<1.0	<1.0
<b>Power-On to Ready (sec, typical, @ 25°C and nominal voltage)</b>	9	9	7	7	5
<b>Voltage</b>					
<b>Voltage Tolerance (including noise)</b>	5V ± 5%, 12V ± 10%	5V ± 5%, 12V ± 10%	5V ± 5%, 12V ± 10%	5V ± 5%, 12V ± 10%	5V ± 5%, 12V ± 10%
<b>Configuration/Organization</b>					
<b>Bytes per Sector</b>	512	512	512	512	512
<b>Guaranteed Sectors</b>	1,465,149,168	976,773,168	781,422,768	488,397,168	312,581,808
<b>Reliability/Data integrity</b>					
<b>Nonrecoverable Read Errors per Bits Read</b>	1 sector per 10E14	1 sector per 10E14	1 sector per 10E14	1 sector per 10E14	1 sector per 10E14
<b>MTBF (hours)/Annualized Failure Rate (AFR) (at 25°C ambient with HDD case within 15°C above ambient)</b>	1+ million/<1%	1+ million/<1%	1+ million/<1%	1+ million/<1%	1+ million/<1%
<b>Contact Start-Stop Cycles (25°C, 50% relative humidity)</b>	50,000	50,000	50,000	50,000	50,000
<b>Environment</b>					
<b>Ambient Temperature, Operating (°C)</b>	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
<b>Ambient Temperature, Nonoperating (°C)</b>	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
<b>Temperature Gradient (°C per hour max)</b>					
Operating/Nonoperating	20/30	20/30	20/30	20/30	20/30
<b>Relative Humidity</b>					
Operating (non-condensing, %)	5 to 90	5 to 90	5 to 90	5 to 90	5 to 90
Nonoperating (non-condensing, %)	5 to 95	5 to 95	5 to 95	5 to 95	5 to 95
<b>Wet Bulb Temperature (°C max)</b>					
Operating/Nonoperating	37.7/40	37.7/40	37.7/40	37.7/40	37.7/40
<b>Shock</b>					
Operating: 2 ms (Gs)	63	63	63	63	63
Nonoperating: 2 ms (Gs)	300	300	300	300	350
<b>Acoustics PVR (typical/max bels)</b>	2.8/2.9	2.8/2.9	2.8/2.9	2.6/2.7	2.5/2.6
<b>Vibration</b>					
5 to 22 Hz, Displacement Limited Operating and Nonoperating (Gs)	0.025	0.025	0.025	0.025	0.025
22 to 350 Hz, Operating/Nonoperating (Gs)	0.5/1.0	0.5/1.0	0.5/1.0	0.5/1.0	0.5/1.0
350 to 500 Hz, Operating/Nonoperating (Gs)	0.25/1.0	0.25/1.0	0.25/1.0	0.25/1.0	0.25/1.0
<b>Dimensions</b>					
<b>Height (mm/in, max)</b>	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	20/0.772
<b>Width (mm/in, max)</b>	101.6/4.00	101.6/4.00	101.6/4.00	101.6/4.00	101.6/4.00
<b>Depth (mm/in, max)</b>	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787
<b>Weight (g/lb, max)</b>	720/1.59	635/1.4	600/1.35	600/1.35	345/0.76

<sup>1</sup>One gigabyte, or GB, equals one billion bytes when referring to hard drive capacity.

AMERICAS Seagate Technology LLC 920 Disc Drive, Scotts Valley, California 95066, United States, 831-438-6550  
 ASIA/PACIFIC Seagate Technology International Ltd. 7000 Ang Mo Kio Avenue 5, Singapore 569877, 65-6485-3888  
 EUROPE, MIDDLE EAST AND AFRICA Seagate Technology SAS 130-136, rue de Silly, 92773, Boulogne-Billancourt Cedex, France 33 1-4186 10 00

Copyright © 2008 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Wave logo are registered trademarks of Seagate Technology LLC in the United States and/or other countries. SV35 Series 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 hard 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. Seagate reserves the right to change, without notice, product offerings or specifications. Publication Number: DS1603.3-0803US, March 2008