

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

1-800-SEAGATE

(1-800-732-4283)

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

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

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