

Data Sheet

DB35.3 Series™

Quiet, reliable hard drives tuned for digital entertainment with the industry's broadest range of capacity choices

80 GB to 750 GB* • PATA* and SATA

Key Advantages

- Capacities of 80, 160, 250, 320, 400, 500 and 750 GB provide space options from entry level to the power system, enabling users to save entire seasons of television programming.
- Up to 750 hours of standard TV capacity, up to 150 hours of high-definition capacity**
- DynaPlay™ technology delivers the storage industry's most comprehensive set of features for the demanding DVR environment, including video streaming performance, power optimization and content security.
- Seagate SoftSonic™ motor technology and optimized seek profiles deliver years of quiet, worry-free operation.
- Available Seagate Secure™ technology improves content security as part of a system digital rights management strategy.
- Seagate® Design Service Centers improve product performance and reliability, while increasing your time to market, by solving CE design issues quickly and efficiently.

Best-Fit Applications

- DVRs
- Home media servers
- Multimedia HDD recorders



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

** Standard TV capacity assumption: MPEG-2 at 2.22 Mb/s; high-definition capacity assumption: MPEG-4 at 12.0 Mb/s

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Specifications	750 GB ¹	500 GB ¹	400 GB ¹	320 GB ¹	250 GB ¹	160 GB ¹	80 GB ¹
Model Number	ST3750640SCE ST3750840SCE ST3750840ACE	ST3500830SCE ST3500830ACE	ST3400820SCE ST3400820ACE	ST3320820SCE ST3320820ACE	ST3250820SCE ST3250820ACE	ST3160215SCE ST3160215ACE	ST380215SCE ST380215ACE
Interface Options	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 Ultra ATA 100	SATA 3Gb/s Ultra ATA 100	SATA 3Gb/s Ultra ATA 100
Performance							
Cache, Multisegmented (MB)	16, 8	8	8	8	8	2	2
SATA Data Transfer Modes Supported (Gb/s)	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5	3.0/1.5
Simultaneous SDTV Streams Supported (Assumes 256K host buffer per stream)	10	10	10	10	10	10	10
Simultaneous HDTV Streams Supported (Assumes 2MB host buffer per stream)	10	10	10	10	10	10	10
Power-On to Ready (typical, sec)	16	16	16	16	16	16	16
Standby to Ready (typical, sec)	16	16	16	16	16	16	16
Transfer Rate							
Maximum External, PATA (MB/s)	100	100	100	100	100	100	100
Maximum External, SATA (MB/s)	300	300	300	300	300	300	300
Voltage							
Voltage Tolerance (including noise)	5V ± 5%, 12V ± 10%						
Environmental							
Ambient Temperature (°C)							
Operating	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60	0 to 60
Nonoperating	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70	-40 to 70
Temperature Gradient, Operating/Nonoperating (°C per hour max)	20/30	20/30	20/30	20/30	20/30	20/30	20/30
Relative Humidity, Operating/Nonoperating (non-condensing, %)	5 to 90/5 to 95	5 to 90/5 to 95	5 to 90/5 to 95	5 to 90/5 to 95	5 to 90/5 to 95	5 to 90/5 to 95	5 to 90/5 to 95
Web Bulb Temperature, Operating/Nonoperating (°C max)	37.7	37.7	37.7	37.7	37.7	37.7	37.7
Shock							
Operating: 2 msec (max, Gs)	63	63	63	63	63	63	63
Nonoperating: 1 msec (max, Gs)	300	300	300	300	300	350	350
Vibration, operating							
5-22 Hz (limited displacement) (Gs)	0.25	0.25	0.25	0.25	0.25	0.50	0.50
22-350 Hz (Gs)	0.50	0.50	0.50	0.50	0.50	0.50	0.50
350-500 Hz (Gs)	0.25	0.25	0.25	0.25	0.25	—	—
Vibration, Nonoperating							
5-22 Hz (limited displacement) (Gs)	0.25	0.25	0.25	0.25	0.25		
22-350 Hz (Gs)	5.00	5.00	5.00	5.00	5.00		
350-500 Hz (Gs)	1.00	1.00	1.00	1.00	1.00		
Power Management							
Startup Current (12 V typical, amps)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Consumer Storage Profile							
PATA (watts)	8.20	8.20	8.20	8.20	8.20	5.0	5.0
SATA (watts)	9.4	9.4	9.4	9.4	9.4	5.8	5.8
Idle Average (watts)	9.3	9.3	9.3	9.3	9.3	4.8	4.8
Standby/Sleep Mode (typical, watts)	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Acoustics							
PVR Profile							
PATA (typical/max, bels)	2.9/3.0	2.9/3.0	2.8/2.9	2.8/2.9	2.7/2.8	2.2/2.3	2.2/2.3
SATA (typical/max, bels)	3.0/3.1	3.0/3.1	2.9/3.0	2.9/3.0	2.8/2.9	2.2/2.3	2.2/2.3
Reliability							
Nonrecoverable Read Errors per Bits Read	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴	1 sector per 10 ¹⁴
Annualized Failure Rate (AFR)	0.68%	0.68%	0.68%	0.68%	0.68%	0.68%	0.68%
Contact Start-Stop Cycles (25°C, 50% relative humidity)	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Dimensions							
Height (mm/in, max)	26.1/1.028	26.1/1.028	26.1/1.028	26.1/1.028	26.1/1.028	19.99/0.787	19.99/0.787
Width (mm/in, max)	101.6/4.00	101.6/4.00	101.6/4.00	101.6/4.00	101.6/4.00	101.6/4.010	101.6/4.010
Depth (mm/in, max)	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.6/5.787	146.6/5.787
Weight (g/lb, max)	720/1.59	720/1.59	635/1.40	580/1.28	580/1.28	380/0.838	380/0.838

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

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