


DB35 7200.2

3.5-inch disc drives for DVRs



Maximum Capacity
and Performance
Optimized for Digital
Video Recorders
(DVRs)

80GB to 500GB* • ATA/100* and SATA

Key Advantages

- Capacities of 80, 120, 160, 200, 250, 300, 400 and 500GB provide the space for the most inveterate viewer to archive entire seasons of television programming.
- Up to 500 hours of standard TV capacity, up to 93 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.
- DriveTrust Technology improves content security as part of a system digital rights management program.
- High reliability for worry-free DVR operation
- 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
- HDD recorders

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





DB35 7200.2

3.5-inch disc drives for DVRs

Specifications	500GB ¹	400GB ¹	300GB ¹	250GB ¹	200GB ¹	160GB ¹	120GB ¹	80GB ¹
Model Number	ST3500841SCE ST3500841ACE	ST3400833SCE ST3400833ACE	ST3300822SCE ST3300822ACE	ST3250824SCE ST3250824ACE	ST3200827SCE ST3200827ACE	ST3160212SCE ST3160212ACE	ST3120213SCE ST3120213ACE	ST3802110SCE ST3802110ACE
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	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	7200	7200	7200
Recording Capacity (Hours)								
SD MPEG-2 (2.22 Mbits/sec)	500	400	300	250	200	160	120	80
HD MPEG-2 (18.52 Mbits/sec)	60	48	36	30	24	—	—	—
HD MPEG-4 (12.00 Mbits/sec)	93	74	56	46	37	—	—	—
Transfer Rate								
Maximum Internal (Mbits/sec)	815.2	815.2	867.2	867.2	867.2	867.2	867.2	867.2
Maximum Sustained (Mbits/sec)	65	65	76	76	76	83	83	83
Cache, Multisegmented (Mbytes)	8	8	8	8	8	2	2	2
ATA Transfer Modes Supported	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	3	3	3
Simultaneous SDTV Streams Supported (Assumes 256K host buffer per stream)	10	10	10	10	10	10	10	10
Simultaneous HDTV Streams Supported (Assumes 2MB host buffer per stream)	10	10	10	10	10	10	10	10
Power-On to Ready (typical sec)	16	16	16	16	16	16	16	16
Standby to Ready (typical sec, max)	16	16	16	16	16	16	16	16
Voltage								
Voltage Tolerance (including noise)	5V ± 5%, 12V ± 10%							
Configuration/Organization								
Bytes per Sector	512	512	512	512	512	512	512	512
Guaranteed Sectors	976,773,168	781,422,768	586,072,368	488,397,168	390,721,968	312,581,808	234,441,648	156,301,488
Reliability/Data Integrity								
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	1 sector per 10 ¹⁴
Annualized Failure Rate (AFR)	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%	0.34%
Power Management								
Startup Current (12 V typical, amps)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Seek (typical, watts)	12.6	12.6	12.6	12.6	12.4	12.4	12.4	12.4
Idle Average (watts)	8	8	8	8	8	8	8	8
Standby/Sleep Mode (typical, watts)	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Consumer Storage Profile (watts)	9.2	9.2	9.2	9.2	<5.5	<5.5	<5.5	<5.5
PVR Profile (watts)	4.88	4.88	4.88	4.88	4.88	4.9	4.9	5.2
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	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	-40 to 70
Temperature Gradient (°C per hour max)								
Operating/Nonoperating	20/30	20/30	20/30	20/30	20/30	20/30	20/30	20/30
Relative Humidity (non-condensing, %)								
Operating/Nonoperating	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	5 to 90/5 to 95
Wet Bulb Temperature (°C max)								
Operating/Nonoperating	33/40	33/40	33/40	33/40	33/40	33/40	33/40	33/40
Shock, Operating: 2 msec (Gs)	63	63	63	63	63	63	63	63
Shock, Nonoperating: 1 msec (Gs)	300	300	300	300	300	300	300	300
Acoustics PVR (typical/max bels)	2.71/2.88	2.71/2.88	2.71/2.88	2.71/2.88	2.71/2.88	2.71/2.88	2.71/2.88	2.71/2.88
Rotational Vibration (Rad/sec, Gs)								
Operating (acceleration)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Nonoperating (5 to 22 Hz/22 to 350 Hz)	0.25/5.0	0.25/5.0	0.25/5.0	0.25/5.0	0.25/5.0	0.25/5.0	0.25/5.0	0.25/5.0
Physical								
Height (mm/in)	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028	26.11/1.028
Width (mm/in)	101.6/4.000	101.6/4.000	101.6/4.000	101.6/4.000	101.6/4.000	101.6/4.000	101.6/4.000	101.6/4.000
Depth (mm/in)	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787	146.99/5.787
Weight (g/lb)	710/1.57	710/1.57	655/1.44	580/1.28	580/1.28	580/1.28	580/1.28	580/1.28

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

www.seagate.com
1-800-732-4283
(1-800-SEAGATE)

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 SA 130-136, rue de Sully, 92773 Boulogne-Billancourt Cedex, France, 33 1-41 86 10 00

Copyright © 2006 Seagate Technology LLC. All rights reserved. Printed in USA. Seagate, Seagate Technology and the Wave logo are registered trademarks of Seagate Technology LLC. DB35 Series, DynaPlay and DriveTrust are either trademarks or registered trademarks of Seagate Technology LLC. Other product names are trademarks or registered trademarks of their owners. One gigabyte, or Gbyte, equals one billion bytes when referring to hard drive capacity. Accessible capacity may vary depending on operating environment and formatting. Quantitative usage examples for various applications are for illustrative purposes. Actual quantities will vary based on various factors, including file size, file format, features and application software. Seagate reserves the right to change, without notice, product offerings or specifications. Publication Number: DS-1596, June 2006