U Series 9 ce and Barracuda 5400.1 ce

Storage for the new world of digital entertainment

The World's
Best-Selling
Consumer
Electronics
Hard Drives

160, 120, 80 and 40 Gbytes • Ultra ATA/100

Key Advantages

- Capacities from 40 Gbytes to 160 Gbytes provide options for a broad range of CE products—
  from entry-level to high-end.
- Optimized streaming performance delivers smooth audio and video to the customer.
- The world's quietest hard drives deliver pure audio enjoyment with virtually no discernible operating sound.
- Specialized motor controller technology reduces power requirements.
- The rugged design of Seagate® drives has high nonoperating shock tolerence and low failure rates.

Best-Fit Applications

- Personal video recorders (PVR)
- Video game consoles
- Audio jukeboxes
- Home media centers
- Home and industrial security systems

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- Whisper-quiet acoustic performance reduces system noise and delivers pure digital audio enjoyment.
- Highly reliable drives with low AFR help to reduce system failures.
- Optimized for A/V applications to deliver smooth, reliable audio and video streams
- Easy-to-use stream management commands are compatible with new ATA streaming command set.
- SeaShell™ packaging protects the drive against 1,000 Gs of nonoperating shock.

Seagate Design Service Centers

- Expertise in helping consumer electronics companies and manufacturers overcome technical issues
- Speeds your time to market by solving CE design issues quickly and efficiently
- Improves your product's reliability and performance
- Field engineering and business support teams are available in person, worldwide
- Advanced application design advice available through our design centers in USA and Singapore

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Specifications	160 GB[1]	120 GB	80 GB	40 GB
Model number	ST3160022ACE	ST3120025ACE	ST380012ACE	ST340015ACE
Drive family	U Series 9	U Series 9	U Series 9	Barracuda®
Recording hours (approximate)[2]				
MP3 (33.3 Mbytes/hour)	19,200	14,400	9,600	4,800
SDTV (1.0 Gbytes/hour)	160	120	80	40
HDTV (4.0 Gbytes/hour)	40	30	20	10
Interface	Ultra ATA/100	Ultra ATA/100	Ultra ATA/100	Ultra ATA/100
Compatible with UDMA-2, -3, -4 chipsets	Yes	Yes	Yes	Yes
Performance				
Simultaneous A/V streams[3]				
SDTV @ average 2.5 Mbytes/sec	8	8	8	5
HDTV @ average 5 Mbytes/sec	4	4	4	2
Average data transfer rate (Mbytes/sec @ UDMA-4)	48	48	48	34
Acoustics				
Idle (sound power, bels), typical	<2.5	<2.5	<2.5	2.6
Seek (sound power, bels), typical	2.8	2.8	2.8	2.8
Power				
Startup current (amps typical on 12V line)	2.3	2.3	2.3	2.0
Seek (watts) typical	12.5	12.5	12.5	7.3
Read/write (40% seeks, watts)	12.0	12.0	12.0	6.6
Idle (watts typical), without off line	7.5	7.5	7.5	5.0
Standby (watts typical/max)	0.9/1.05	0.9/1.05	0.9/1.05	1.4/1.6
Power on & standby to ready (typical, sec)	10	10	10	6.5
Reliability/Robustness				
Nonoperating shock (Gs @ 2 msec)	350	350	350	350
Operating shock (Gs @ 2 msec)	63	63	63	63
Contact start/stops (cycles @ ambient)	50,000	50,000	50,000	50,000
Mean Time Between Failures (hours)	600,000	600,000	600,000	600,000
Environmental				
Operating temperature (ºC)	0 to 60	0 to 60	0 to 60	0 to 60
Nonoperating temperature (ºC)	−40 to 70	−40 to 70	−40 to 70	−40 to 70
Physical Configuration				
Discs/heads	2/4	2/3	1/2	1/1
Height (inches/mm)	1.03/26.1	1.03/26.1	1.03/26.1	.79/20
Width (inches/mm)	4/102	4/102	4/102	4/102
Depth (inches/mm)	5.8/147	5.8/147	5.8/147	5.8/147
Weight (lbs/g)	1.4/635	1.4/635	1.4/635	1.1/454

[1]Formatted capacity in gigabytes, 512 bytes/sector. Capacity calculated as 1 gigabyte = 10^9 bytes.

[2]Recording times are approximate and may vary due to quality and compression levels.

[3]Assumes at least 2 megabytes of available host buffer per stream. ATA security feature modes fully supported.