

Apacer AS510S

The Speedy and Reliable Companion for PC and Notebooks

Apacer AS510S solid state drive (SSD) is a speedy and reliable companion for consumer PC and laptops. Designed in SATA 6 Gb/s interface, the drive can deliver outstanding performance up to 545 MB/s data transfer speed, highly suitable to serve as operating system boot drive or storage media of important data. Power efficiency wise, AS510S supports SATA power management modes which greatly cut power consumptions to make it an environmental and economical storage drive than traditional hard disk drives.

In addition, enhanced data integrity is enabled by a powerful ECC engine in the device correcting up to 72bit per 1KB data. With the advantages mentioned above, AS510S is proved to be the ideal companion for PC and laptop users.

Applications

- PC/NB for general storage
- Operating system boot drive for PC/NB
- Network servers
- Industrial PCs
- Graphic and video applications
- Kiosk, POS and automation.
- Multimedia
- Gaming

Features:

- SATA 6.0 Gb/s interface compliance
- Outstanding read/write performance
- Supports SATA Power Management
- Powerful ECC engine correcting up to 72bit/1KB
- Supports S.M.A.R.T. commands
- TRIM



SATA SSD AS510S



General Product Specifications

Specifications					
Interface	SATA 6 Gb/s interface				
SATA III Burst Speed	600 MB/s				
Capacity*	64, 128, 256 and 480 GB				
Performance**	64 GB	Read: up to 440 MB/s; Write: up to 205 MB/s			
	128 GB	Read: up to 525 MB/s; Write: up to 380 MB/s			
	256 GB	Read: up to 530 MB/s; Write: up to 410 MB/s			
	480 GB	Read: up to 545 MB/s; Write: up to 505 MB/s			
Form Factor	2.5 inch				
NAND Flash Media	MLC				
ECC	up to 72bit/1KB				
MTBF	1,000,000 hours (approx.)				
Operating Voltage	5V ± 5%				
Power consumption*** (unit: mA)	Capacity	Operating	Idle	Partial	Slumber
	64 GB	850	85	20	15
	128 GB	870	85	20	15
	256 GB	900	85	20	15
	480 GB	1142	58	14	11
Dimension	100.10mm(L) x 69.85mm(W) x 7.00mm(H)				
Endurance****	64 GB	128 GB	256 GB	480 GB	
	158 TBW	317 TBW	670 TBW	1370TBW	
Reliability Features	S.M.A.R.T, TRIM, Wear-leveling				
Temperature	Operating	0°C to 70°C			
	Storage	-40 ~ +85°C			
Humidity	RH 90% under 40°C				
Shock*****	500G/2ms				
Vibration*****	80 – 2000Hz/20G				
Acoustic	0dB				
Warranty	3 years				
Package Content	Retail package				
Certifications	RoHS, CE, FCC, BSMI				

*Unformatted. Theoretically, 1GB=1,000,000,000 Bytes. Under operating systems, the capacity might appear to be less than the theoretical capacity because the calculation in OS is based on 1 GB = 1024 MB / 1MB =1024KB and a minority of the capacity is reserved for maintenance purposes.

**Performance results may vary from flash configurations or host system settings. Test results are based on ATTO platform.

***Power consumption were measured at 5.0V and results may vary from flash configurations or host system settings.

****Estimated under typical PC user behaviors, NAND endurance cycles, write amplification and wear leveling factors.

*****Shock and vibrations are subject to change without notice

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Ordering Information

Capacity	Bulk	Distributor/Retailer
64 GB	AP64GAS510SB	AP64GAS510SB-1
128 GB	AP128GAS510SB	AP128GAS510SB-1
256 GB	AP256GAS510SB	AP256GAS510SB-1
480 GB	AP480GAS510SB	AP480GAS510SB-1

Revision History

Version	Description	Date
0.1	Preliminary release	02/15/2013
0.2	Added Ordering Information	02/26/2013
0.3	Added TBW	03/01/2013
0.4	Added performance information for 256GB	03/12/2013
1.0	Official release	04/03/2013
1.1	Warranty is extended to 3 years	05/21/2013
1.2	Model name renamed as AS510S	06/19/2013
1.3	Removed AES-256 information	08/18/2014
1.4	Added BSMI certification	08/20/2014
1.5	Added 480 GB to capacity list	01/19/2015

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