

## Apacer SC Series

### Speedy and Reliable Companion

#### for PC and Notebooks

Apacer's SC series is a well-balanced solid-state disk (SSD) drive with compact form factor (JEDEC MO-300) and great performance. Designed in SATA 6.0 Gbps interface, mSATA SSD is able to deliver outstanding performance up to 505 MB/s data transfer speed, making it the ideal companion for heavy-loading embedded or server operations with space constraints for host computing systems. For data efficiency, the internal controlling unit of mSATA SSD is engineered with a 6MB DRAM as a write cache for improved random performance and enhanced endurance. Page mapping is adopted to increase random access speed and improve SSD lifespan, reduce block erase frequency, and achieve optimized performance and lifespan.

mSATA SSD comes with various implementations including power saving modes, flash block management, TRIM, and power failure management. In terms of reliability, the drive supports global wear leveling, S.M.A.R.T., and ECC engine correcting up to 40bit per 1KB data. With the advantages of performance, features, and reliability mentioned above, mSATA SSD is proved to be the best companion for PC and laptop upgrade.

#### Features:

- Compatible with SATA 6.0 Gb/s interface
- Outstanding read/write performance
- Supports SATA Power Management
- ECC engine correcting up to 40bit/1KB sector
- Flash Translation Layer : Page Mapping
- Global Wear Leveling
- Supports S.M.A.R.T. commands
- TRIM

#### 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

## General Product Specifications

Specifications					
Interface	SATA 6.0 Gb/s interface				
SATA 6.0 Gbps Burst Speed	600 MB/s				
Capacity <sup>1</sup>	30, 60, 120, 240 GB				
Performance <sup>2</sup>	Capacity	30GB	60GB	120GB	240GB
	Sequential read (MB/s)	Up to 375	Up to 390	Up to 505	Up to 505
	Sequential write (MB/s)	Up to 100	Up to 90	Up to 175	Up to 345
Form Factor	JEDEC MO-300				
NAND Flash Media	MLC				
ECC	Up to 40 bit/1KB				
MTBF	1,000,000 hours (approx.)				
Operating Voltage	3.3V ± 5%				
Power Consumption <sup>3</sup> (unit: mA)	Capacity	30GB	60GB	120GB	240GB
	Active	320	335	460	710
	Idle	90	95	95	80
Dimensions	50.80mm (L) x 29.85mm (W) x 3.80mm (H)				
Technology Highlights	S.M.A.R.T, global wear leveling, power failure management, SATA Power Management (Partial, Slumber, Auto-Slumber), TRIM, flash bad-block management, page mapping, ATA secure erase				
Temperature	Operating	Standard	0°C to 70°C		
		Extended	-40°C to 85°C		
	Storage	-40°C to 100°C			
Humidity	Operating	25°C, 8% ~ 95%, non-condensing			
	Non-operating	40°C, 8% to 93%, non-condensing			
Shock <sup>4</sup>	Sine, 3.13G, 5~800Hz				
Vibration <sup>4</sup>	Half sine, 1500G/1.0msec				

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<sup>1</sup> 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.

<sup>2</sup> Performance results may vary from flash configurations or host system settings. Test results are based on ATTO platform.

<sup>3</sup> Power consumption were measured at 3.3V and results may vary from flash configurations or host system settings.

<sup>4</sup> Shock and vibrations are subject to change without notice.

Specifications	
Warranty	3 years or 300 P/E cycles (whichever occurs first)
Package Content	Bulk package
Certifications	RoHS, CE, FCC, MIL-STD-810F

## Ordering Information

Capacity	Part Number
30GB	AP30GSC30
60GB	AP60GSC30
120GB	AP120GSC30
240GB	AP240GSC30

## Revision History

Version	Description	Date
1.0	Official release	12/6/2017

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