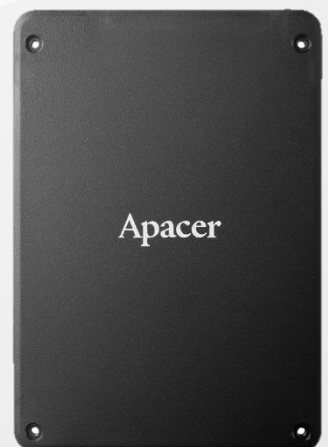# Apacer

The Most **Reliable**
Storage For Industries
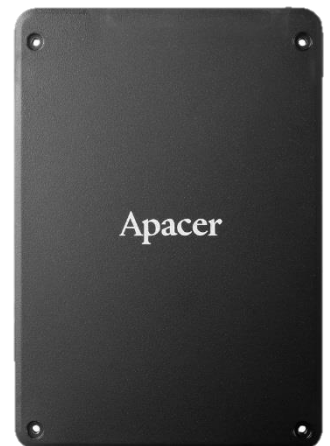
SM310-25

SM310-25

Overview

Apacer SM310-25 (2.5 inch) Embedded Solid State Drive is a speedy and reliable companion for industrial PC and laptops. Designed in SATA 6.0 Gb/s interface, the drive can deliver outstanding performance up to 530 MB/s sustained transfer rate, highly suitable to serve as operating system boot drive or storage media of important data. With its compliance with the latest SATA specification, this cutting edge device supports power management, which greatly saves in power consumption, making it more environmental and economical than traditional hard disk drives.

Regarding data reliability, the controller unit of SM310-25 is built with a powerful ECC engine in the device correcting up to 72bit per 1KB data. For better I/O performance, the controller unit comes with an external DDR3 cache to strengthen the IOPS (Input Output Per Second) of the device, proving to be the ideal companion for PC and laptop users.

Last but not the least, with Advanced Encryption Standard (AES) and Trusted Computing Group (TCG) Opal support, SM310-25 ensures data security and provides users with a peace of mind knowing their data is safeguarded against unauthorized use at all times.
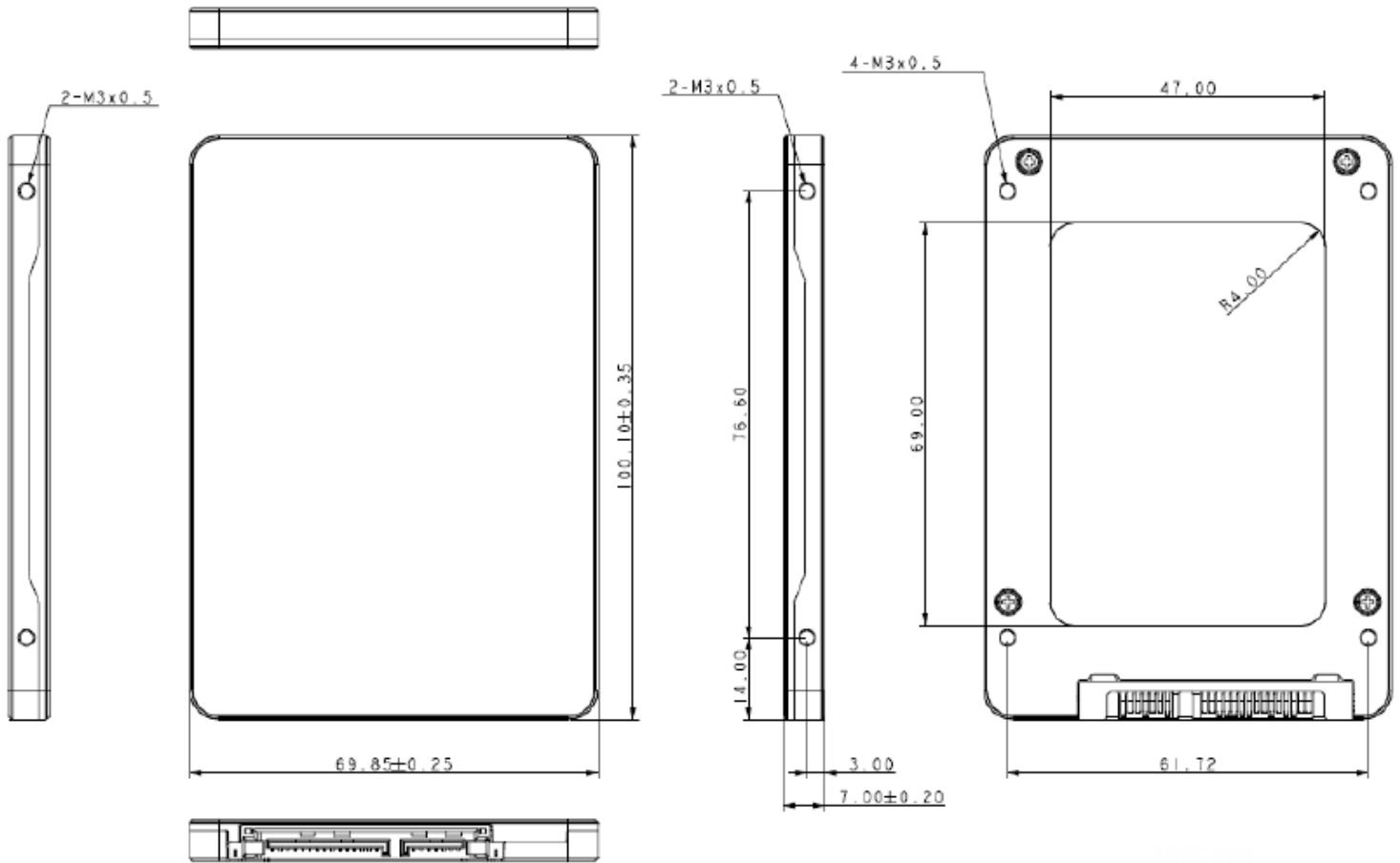
Feature

· Built-in hardware ECC

· Global Wear Leveling

· Flash bad-block management

· S.M.A.R.T.

· Power Failure Management

· TRIM

· Support TCG Opal 2.0/AES 256-bit encryption

Specifications

Model	SM310-25
Interface	SATA 3.0 (6Gb/s)
Connector	(7+15) pin
Form Factor	2.5"
NAND Flash Type	MLC
Capacity	With AES 256 support: 128GB~1TB With TCG Opal 2.0 support: 128GB~512GB
External DRAM	No
Sustained Read Performance (MB/sec)	Up to 530
Sustained Write Performance (MB/sec)	Up to 355
ECC Engine	Built-in 72-bit per 1K bytes BCH ECC
IOPS (4K Random Write)	71K
Standard Operating Temperature (°C)	0 ~ + 70
Extended Operating Temperature (°C)	-40 ~ + 85
Storage Temperature (°C)	-40 ~ + 100
Shock	Operation: 50G/11ms (compliant with MIL-STD-202G) Non-operation: 1500G/0.5ms (compliant with MIL-STD-883K)
Vibration	Operation:7.69 Grms, 20~2000 Hz/random (compliant with MIL-STD-810G) Non-operation: 4.02Grms, 15~2000 Hz/sine (compliant with MIL-STD-810G)
Operating Voltage	5.0 V±5%
Power Consumption	Active mode: 635 mA / Idle mode: 100 mA
Dimension (L x W x H)	7mm:100.10 x 69.85 x 7.00mm
MTBF (hours)	>1,000,000

Apacer

Mechanical Specification

2-M3x0.5

2-M3x0.5

4-M3x0.5

47.00

100.10±0.35

69.85±0.25

76.60

14.00

3.00

7.00±0.20

69.00

R4.00

61.72

Unit: mm
Tolerance: ±2

For more information,
contact your Apacer representative